REDACTED VERSION

F-6-8707-11

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

REGION	SITE NUMBER (to be assigned by HQ)
6	OKD980750319

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (*Section II*). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Tack Force (*EN-335*); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET (or other identifier)		
Air Center, Inc.	Hwy. 8, Wiley Post Airport, 7300 N.W. 63rd		
C. CITY	**D. STATE**	**E. ZIP CODE**	**F. COUNTY NAME**
Oklahoma City	OK	73131	Oklahoma

G. SITE OPERATOR INFORMATION

1. NAME	2. TELEPHONE NUMBER		
Mr. Lou Dominguez, Mgr. Airport Planning and Development	(405) 681-5311		
3. STREET	**4. CITY**	**5. STATE**	**6. ZIP CODE**
P.O. Box 5993	Oklahoma City	OK	73159

H. REALTY OWNER INFORMATION (*if different from operator of site*)

1. NAME	2. TELEPHONE NUMBER	
City of Oklahoma City	(405) 231-2011	
3. CITY	**4. STATE**	**5. ZIP CODE**
Oklahoma City	OK	73102

I. SITE DESCRIPTION

Former aircraft renovation and paint stripping facility

J. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☒ 4. MUNICIPAL ☐ 5. PRIVATE

II. TENTATIVE DISPOSITION (*complete this section last*)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (*mo., day, & yr.*)	B. APPARENT SERIOUSNESS OF PROBLEM
	☐ 1. HIGH ☒ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE

C. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE (*mo., day, & yr.*)
Ravinder Joseph, ICF Technology/FIT	(214) 744-1641	July 29, 1987

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION

1. NAME	2. TITLE	
Debra Pandak	FIT Environmental Scientist	
3. ORGANIZATION		**4. TELEPHONE NO. (*area code & no.*)**
ICF Technology, 1509 Main Street, Suite 900, Dallas, Texas 75201		(214) 744-1641

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
Ravinder Joseph	ICF Technology, Dallas	(214) 744-1641
Heather Schijf	ICF Technology, Dallas	(214) 744-1641
Tom Rountree	ICF Technology, Dallas	(214) 744-1641

C. SITE REPRESENTATIVES INTERVIEWED (*corporate officials, workers, residents*)

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
Scott A. Thompson	Environmental Specialist (405) 271-2702	Oklahoma State Dept. of Health, P.O. Box 53551, 1000 N.E. Tenth, Oklahoma City, OK 73152
John N. Ice	Environmental Health Spec. (405) 271-7063	Oklahoma State Department of Health, Industrial Waste Division

9796610

Continued From Front

III. INSPECTION INFORMATION *(continued)*

D. GENERATOR INFORMATION *(sources of waste)*

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENERATED
Air Center, Inc.	N/A	Hanger 8, Wiley Post Airport	Paints, Solvents,
(Out of Business)		7300 N.W. 63rd, Oklahoma City, OK 73131	Paint Stripping,
			Waste Water

E. TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORTED
N/A			

F. IF WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS
N/A		

G. DATE OF INSPECTION *(mo., day, & yr.)*	H. TIME OF INSPECTION	I. ACCESS GAINED BY: *(credentials must be shown in all cases)*
7/23/87	1200-1400 hours	[x] 1. PERMISSION [ ] 2. WARRANT

J. WEATHER *(describe)*

Warm and sunny. Approximately 92° F. Winds from the SW at 10-15 mph

IV. SAMPLING INFORMATION

A. Mark 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, etc. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN *(mark 'X')*	3. SAMPLE SENT TO:	4. DATE RESULTS AVAILABLE
a. GROUNDWATER			
b. SURFACE WATER			
c. WASTE			
d. AIR			
e. RUNOFF			
f. SPILL			
g. SOIL			
h. VEGETATION			
i. OTHER *(specify)*	x	No samples were taken during this inspection	

B. FIELD MEASUREMENTS TAKEN *(e.g., radioactivity, explosivity, PH, etc.)*

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS
HNU	Continuous monitoring at site	No readings above background
RAM-4	Continuous monitoring at site	No readings above background
Metal Detector	Area between drainage ditch and hangers	Detected metal close to concrete drainage pipe and to the east side of paint stripping hangers

Continued From Page 2

IV. SAMPLING INFORMATION (continued)

G. PHOTOS

1. TYPE OF PHOTOS: [X] a. GROUND [ ] b. AERIAL

2. PHOTOS IN CUSTODY OF: EPA Region 6 (see attached)

D. SITE MAPPED?

[X] YES. SPECIFY LOCATION OF MAPS: Location map and site sketch attached

E. COORDINATES

1. LATITUDE (deg.-min.-sec.): 35° 32' 17" N

2. LONGITUDE (deg.-min.-sec.): 97° 38' 30" W

V. SITE INFORMATION

A. SITE STATUS

[ ] 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

[X] 2. INACTIVE (Those sites which no longer receive wastes.)

[ ] 3. OTHER (specify): _____ (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

[ ] 1. NO [X] 2. YES (specify generator's four-digit SIC Code): 3724

C. AREA OF SITE (in acres)

11.5 (estimated)

D. ARE THERE BUILDINGS ON THE SITE?

[ ] 1. NO [X] 2. YES (specify): There are three hangers, an above ground water tank and a shed adjoining the tank

VI. CHARACTERIZATION OF SITE ACTIVITY

...ate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

	A. TRANSPORTER	X'	B. STORER	X'	C. TREATER	X'	D. DISPOSER
1.	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
2.	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
3.	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
4.	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
5.	5. PIPELINE	X	5. TANK, BELOW GROUND		5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
6.	6. OTHER (specify):		6. OTHER (specify): Tank covers discovered on site (photos 19 and 20) point to the presence of underground storage tanks. (See attached ROC to Wayne O'Berg.)		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY	X	8. OTHER (specify): A lagoon which has since been filled up is presumed to be on site. Drainage ditch.
					9. OTHER (specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

[X] 1. STORAGE [ ] 2. INCINERATION [ ] 3. LANDFILL [ ] 4. SURFACE IMPOUNDMENT [ ] 5. DEEP WELL

[ ] 6. CHEM/BIO/PHYS TREATMENT [ ] 7. LANDFARM [ ] 8. OPEN DUMP [ ] 9. TRANSPORTER [ ] 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

[X] 1. LIQUID [ ] 2. SOLID [X] 3. SLUDGE [ ] 4. GAS

B. WASTE CHARACTERISTICS

[ ] 1. CORROSIVE [ ] 2. IGNITABLE [ ] 3. RADIOACTIVE [ ] 4. HIGHLY VOLATILE

[X] 5. TOXIC [ ] 6. REACTIVE [ ] 7. INERT [ ] 8. FLAMMABLE

[ ] 9. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

No

Continued From Front

VII. WA[illegible]RELATED INFORMATION (continued)

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT: 500-700 (est)	AMOUNT: Unknown	AMOUNT: Unknown	AMOUNT: 200 (est)	AMOUNT: None	AMOUNT: None
UNIT OF MEASURE: gallons/year	UNIT OF MEASURE:	UNIT OF MEASURE:	UNIT OF MEASURE: gallons/week	UNIT OF MEASURE:	UNIT OF MEASURE:
X (1) PAINT, PIGMENTS	X (1) OILY WASTES	X (1) HALOGENATED SOLVENTS	X (1) ACIDS	X (1) FLYASH	X (1) LABORATORY, PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER (specify):	X (2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER (specify):	X (3) CAUSTICS	(3) MILLING/MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMELTING WASTES	(4) MUNICIPAL
X (5) OTHER (specify): paint stripping sludge			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER (specify):
			(6) CYANIDE	(6) OTHER (specify):	
			X (7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			X (11) OTHER (specify): paint remover		

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE (place in descending order of hazard)

1. SUBSTANCE	2. FORM (mark 'X') a. SOLID	b. LIQ.	c. VAPOR	3. TOXICITY (mark 'X') a. HIGH	b. MED.	c. LOW	d. NONE	4. CAS NUMBER	5. AMOUNT	6. UNIT
Chromium	X	X						7440-47-5	Unknown	
Lead	X	X						7439-92-1	Unknown	
Cadmium	X							7440-43-9	Unknown	

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

X A. HUMAN HEALTH HAZARDS

Past sampling results show chromium and lead were found in levels above background in Woodlake pond sediments. This is a potential health hazard as children were observed playing in mud at the edges of the pond (photo #8) and a resident was seen fishing.

Continued From Page 4

VIII. HAZARD DESCRIPTION *(continued)*

☐ **B. NON-WORKER INJURY/EXPOSURE**

☐ **C. WORKER INJURY/EXPOSURE**

☐ **D. CONTAMINATION OF WATER SUPPLY**

☒ **E. CONTAMINATION OF FOOD CHAIN**

Possible contamination of fish in Woodlake pond. Recon team documented fishing in this pond (photo #11). There had been a complaint of bad tasting fish from a resident some years back.

☐ **F. CONTAMINATION OF GROUND WATER**

☒ **G. CONTAMINATION OF SURFACE WATER**

The Oklahoma State Department of Health found significant concentrations of heavy metals (lead and chromium) in the sediments of Woodlake pond and along the drainage path leading to the pond. No visual evidence of this was observed during the FIT recon.

Continued From Front

VIII. HAZARD DESCRIPTION (continued)

[X] H. DAMAGE TO FLORA/FAUNA

Circular patches of dead vegetation approximately two feet in diameter were found to the east of the water tank. Patches of lighter vegetation were also noticed adjoining the east side of the hangers.

[ ] I. FISH KILL

[ ] J. CONTAMINATION OF AIR

[ ] K. NOTICEABLE ODORS

[ ] L. CONTAMINATION OF SOIL

[ ] M. PROPERTY DAMAGE

Continued From Page 6

VIII. HAZARD DESCRIPTION *(continued)*

☐ N. FIRE OR EXPLOSION

☐ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

☐ P. SEWER, STORM DRAIN PROBLEMS

☐ Q. EROSION PROBLEMS

☒ R. INADEQUATE SECURITY

Air Center has been out of business since March 1984. The facility is on airport property, which is completely fenced. The site has a locked gate in front approximately five feet tall. Employees of the airport could access the property easily.

☐ S. INCOMPATIBLE WASTES

VIII. HAZARD DESCRIPTION (continued)

☐ T. MIDNIGHT DUMPING

☒ U. OTHER (specify):

Air Center generated waste water from paint stripping operations of airplanes and the waste water was supposedly stored in two 500 gallon underground storage tanks and then pumped out. However it was noticed during an inspection by the Oklahoma Water Resources Board that the liquid was allowed to drain into an unlined lagoon. The lagoon was later covered up and the waste water was allowed to drain directly into a drainage ditch which went under Rockwell Avenue and led to a residential pond (Woodlake Pond). The facility went out of business about March 1984.

The Oklahoma State Department of Health took samples along the drainage pathway from the residential pond. The samples revealed significant concentrations of lead and chromium in the sediments. Some contaminants, like cadmium, and trace amounts of arsenic were also found. Phenols were also detected in water and sediments (186,000 mg/l in water and 4,820 mg/kg in sediment) in June 1984. No organics were detected in four samples tested by the Oklahoma State Board of Health in April 1986.

On July 23, 1987 FIT conducted a site recon to support the HRS package completed on this site. The objectives of the site recon were to ascertain the migration path of contaminants along the drainage path and to do a residential well survey. Other objectives of the recon were to determine the existence of two NOS 500-gallon underground storage tanks and the lagoon on site. The development of a sampling plan to determine the presence and spread of contaminants was also a major objective.

(Continued on Attachment A)

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE (specify units)
1. IN RESIDENTIAL AREAS	760	760	200	½ mile
2. IN COMMERCIAL OR INDUSTRIAL AREAS	500	500	20	1 mile
3. IN PUBLICLY TRAVELLED AREAS	1,000/day	1,000/day	10	¼ mile
4. PUBLIC USE AREAS (parks, schools, etc.)	100	100	1	¼ mile

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER (specify unit)	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
40-45' (est)	SW	Drinking Water/Irrigation
D. POTENTIAL YIELD OF AQUIFER	**E. DISTANCE TO DRINKING WATER SUPPLY (specify unit of measure)**	**F. DIRECTION TO DRINKING WATER SUPPLY**
Unknown	3/4 mile	East

G. TYPE OF DRINKING WATER SUPPLY

☐ 1. NON-COMMUNITY < 15 CONNECTIONS ☒ 2. COMMUNITY > 15 CONNECTIONS (specify town): Oklahoma City & Warr Acres-Surface Water (Lake Hefner)

☐ 3. SURFACE WATER ☒ 4. WELL City of Bethany - ground water

Continue On Page 9

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA (continued)

LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH (specify unit)	3. LOCATION (proximity to population/buildings)	4. NON-COMMUNITY (mark 'X')	5. COMMUNITY (mark 'X')
		See Attachment A		

RECEIVING WATER

1. NAME: Woodlake Pond

☐ 2. SEWERS ☐ 3. STREAMS/RIVERS ☒ 4. LAKES/RESERVOIRS ☐ 5. OTHER (specify):

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

Woodlake Pond is used mainly for recreational use and for fishing. Drainage path leads from this into a series of lakes across Bluff Creek Canal and possibly into Silver Lake and Ski Island, also used for recreational purposes.

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN:

☐ A. KNOWN FAULT ZONE ☐ B. KARST ZONE ☐ C. 100 YEAR FLOOD PLAIN ☐ D. WETLAND

☐ E. A REGULATED FLOODWAY ☐ F. CRITICAL HABITAT ☒ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK (specify below)	'X'	C. OTHER (specify below)
X	1. SAND	X	Red shale, sandstone	X	unconsolidated interfringering lenses of sand, silt, gravel and clay
X	2. CLAY				
	3. GRAVEL				

XIII. SOIL PERMEABILITY

☐ A. UNKNOWN ☐ B. VERY HIGH (100,000 to 1000 cm/sec.) ☐ C. HIGH (1000 to 10 cm/sec.)

☐ D. MODERATE (10 to .1 cm/sec.) ☒ E. LOW (.1 to .001 cm/sec.) ☒ F. VERY LOW (.001 to .00001 cm/sec.)

G. RECHARGE AREA

☒ 1. YES ☐ 2. NO 3. COMMENTS: Possible recharge of alluvium and bedrock aquifers

H. DISCHARGE AREA

☐ 1. YES ☒ 2. NO 3. COMMENTS:

I. SLOPE

1. ESTIMATE % OF SLOPE: 1-3%

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.: East and Northeast

J. OTHER GEOLOGICAL DATA

 Continue On Reverse

Continued From Front

XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g.,RCRA,State,NPDES,etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo.,day,&yr.)	E. EXPIRATION DATE (mo.,day,&yr.)	F. IN COMPLIANCE (mark 'X') 1. YES	2. NO	3. UN-KNOWN
See Attachment A							

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

[X] NONE [ ] YES (*summarize in this space*)

GCMS Samples residential Pond

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition (*Section II*) information on the first page of this form.

RCRA-Cleanup in 83-84

One time discharge Chromic Acid 200 ppm

OSDH Did a SI, Continued from SI before S.T.

RECORD OF COMMUNICATION

(405) 787-2463

[x] none Call [ ] Discussion [ ] Field Trip
[ ] Conference [ ] Other(Specify)

(Record of Item Checked Above)

TO:
Wayne O'Berg
Former Director of Operations
for Air Center, Inc.
Oklahoma City

FROM:
Heather Schijf, ICF Technology

DATE
9/8/87

TIME
8:30 a.m.

SUBJECT
Location of Storage Tanks on Air Center Property

SUMMARY OF COMMUNICATION

There were two 500-gallon storage tanks located on the property at the time of the closure of the Air Center, Inc. in 1985. The tanks are located along the outside of the east well of the northend of hanger 8B. The storage tanks came out from the building (in an easterly direction) for approximately 15 to 20 feet. The depth of the tanks is approximately six to eight feet. The tanks were used to hold stripped sludge, and when full the sludge was pumped into a pumper truck and transported to a disposer in Kansas City. The waste was manifested. At closure, the tanks were pumped and empty. The airport repumped the tanks again. To his knowledge, the tanks are empty of stripper sludge.

Two drainage ditches with a series of screens (sumps) were located in the floor of hanger 8B. The stripped material would come off the planes and go into the drainage ditch, then the settled solids would go into the holding tanks and the liquid (mainly water) would leave the building through a concrete drainage pipe. The liquid would be held in three holding ponds. The ponds worked on an overflow method. When the first one was full, it would overflow into the next pond located just below it (it was terraced). The second pond was located in the trees. By the time the liquid reached the third pond, the liquid was clear and aquatic life was present. The liquid was treated naturally - no chemicals were used. The settling ponds were unlined. The first pond was approximately 100 feet by 100 feet. The State Health Department did sampling in 1984 and gave the Air Center a clean bill of health. In 1984, the State Health Department came in on a report that the Air Center was discharging phenols. According to Mr. O'Berg, the Air Center did not use phenols. They used a brand called Elderado. At one time, they were using a stripper with low levels of chromium but switched and used a stripper with no chromium. The sampling by the State went on for approximately four months and a clean bill of health was given. / Heather Schijf 9-8-87

INFORMATION COPIES TO:

EPA Form 1300-6 (7-72)
Replaces EPA HQ Form 5300-3 Which May Be Used Until Supply is Exhausted.

STORAGE FACILITIES SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. STORAGE AREA HAS CONTINUOUS IMPERVIOUS BASE
☐ YES ☐ NO Unknown

2. STORAGE AREA HAS A CONFINEMENT STRUCTURE
☐ YES ☐ NO Unknown

3. EVIDENCE OF LEAKAGE/OVERFLOW *(If "Yes", document where and how much runoff is overflowing or leaking from containment)*
☐ YES ☐ NO Unknown

4. ESTIMATE TYPE AND NUMBER OF BARRELS/CONTAINERS
None

5. GLASS OR PLASTIC STORAGE CONTAINERS USED
☐ YES ☒ NO

6. ESTIMATE NUMBER AND CAPACITY OF STORAGE TANKS
Two NOS 500-gallon underground storage tanks according to Air Center permit application in February 1984. Visual evidence of tanks seen in attached photos (photo #9, photo #20).

7. NOTE LABELING ON CONTAINERS
None. Tanks used to store paint stripping sludge.

8. EVIDENCE OF LEAKAGE CORROSION OR BULGING OF BARRELS/CONTAINERS/STORAGE TANKS *(If "Yes", document evidence. Describe location and extent of damage. Take PHOTOGRAPHS)*
☐ YES ☐ NO
Unknown

9. DIRECT VENTING OF STORAGE TANKS
☐ YES ☒ NO

10. CONTAINERS HOLDING INCOMPATIBLE SUBSTANCES *(If "Yes", document evidence. Describe location and identity of hazardous waste. Take PHOTOGRAPHS.)*
☐ YES ☐ NO Unknown

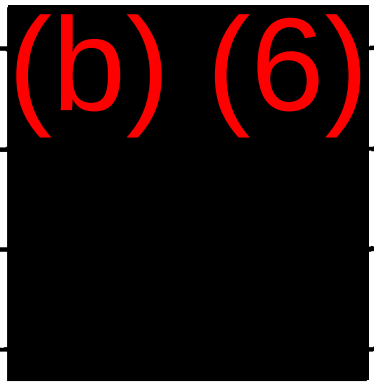
11. INCOMPATIBLE SUBSTANCES STORED IN CLOSE PROXIMITY *(If "Yes", document evidence. Describe location and identity of hazardous waste. Take PHOTOGRAPHS.)*
☐ YES ☐ NO Unknown

12. ADEQUATE CONTAINER WASHING AND REUSE PRACTICES
☐ YES ☒ NO

13. ADEQUATE PRACTICES FOR DISPOSAL OF EMPTY STORAGE CONTAINERS
☐ YES ☒ NO

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)



2. Date well was dug Unknown

3. Depth of well 110 feet

4. Depth to static water 30 feet

5. Is the well cased? Yes x No _____ Unknown _____
   If so, to what depth? 80 feet
   What type of casing is used? Steel

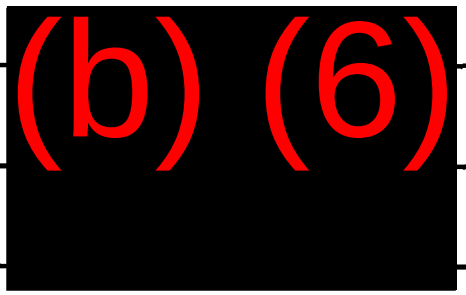
6. Is well screened? Yes _____ No _____ Unknown _____
   Foot Valve

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) drinking, irrigation, livestock

8. Any other pertinent information? No treatment

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)



2. Date well was dug Unknown

3. Depth of well Unknown

4. Depth to static water Unknown

5. Is the well cased? Yes _____ No _____ Unknown x
   If so, to what depth? _____
   What type of casing is used? _____

6. Is well screened? Yes _____ No _____ Unknown x

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) possibly livestock

8. Any other pertinent information? _____

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6)

2. Date well was dug Unknown

3. Depth of well Unknown

4. Depth to static water Unknown

5. Is the well cased? Yes _____ No _____ Unknown X
   If so, to what depth? _____
   What type of casing is used? _____

6. Is well screened? Yes _____ No _____ Unknown X

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) unknown

8. Any other pertinent information? Water is used for gardening; drinking water comes from the city.

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6)

2. Date well was dug Unknown

3. Depth of well Unknown

4. Depth to static water Unknown

5. Is the well cased? Yes _____ No _____ Unknown x
   If so, to what depth? _____
   What type of casing is used? _____

6. Is well screened? Yes _____ No _____ Unknown x

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) unknown

8. Any other pertinent information? Water is used for gardening; drinking water comes from the city.

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6)

2. Date well was dug Unknown

3. Depth of well Unknown

4. Depth to static water Unknown

5. Is the well cased? Yes _____ No _____ Unknown x
   If so, to what depth? _____
   What type of casing is used? _____

6. Is well screened? Yes _____ No _____ Unknown x

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) No use known.

8. Any other pertinent information? Lady in hospital - information from owners at (b) (6)

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6)

2. Date well was dug 1972

3. Depth of well 55 Feet

4. Depth to static water Unknown

5. Is the well cased? Yes x No _____ Unknown _____
   If so, to what depth? Unknown
   What type of casing is used? Unknown

6. Is well screened? Yes _____ No _____ Unknown x

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) Gardening

8. Any other pertinent information? No septic tank. Well tested and quality good, according to owner.

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6)

2. Date well was dug 1977

3. Depth of well Unknown

4. Depth to static water Unknown

5. Is the well cased? Yes _____ No _____ Unknown x
   If so, to what depth? Unknown
   What type of casing is used? Unknown

6. Is well screened? Yes _____ No _____ Unknown x

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) Garden, lawn

8. Any other pertinent information? City of Bethany - drinking. Husband may know more.

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6)

2. Date well was dug Unknown

3. Depth of well Unknown

4. Depth to static water Unknown

5. Is the well cased? Yes _____ No _____ Unknown x
   If so, to what depth? _____
   What type of casing is used? _____

6. Is well screened? Yes _____ No _____ Unknown x

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) Unknown

8. Any other pertinent information? Used well in past. City water now.
   (Dog)

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6)

2. Date well was dug 1948

3. Depth of well Approximately 80 feet.

4. Depth to static water Can overflow

5. Is the well cased? Yes x No _____ Unknown _____
   If so, to what depth? _____
   What type of casing is used? PVC

6. Is well screened? Yes _____ No _____ Unknown x

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) Lawn and garden

8. Any other pertinent information? Well - lawn; city water - drinking; water softening service - City of Bethany; hard water - 90 grains. Gave business card.

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6)

2. Date well was dug Unknown

3. Depth of well Unknown

4. Depth to static water Unknown

5. Is the well cased? Yes _____ No _____ Unknown x
   If so, to what depth? _____
   What type of casing is used? _____

6. Is well screened? Yes _____ No _____ Unknown x

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) _____

8. Any other pertinent information? Two wells.

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6)

2. Date well was dug _____

3. Depth of well 75 feet

4. Depth to static water About 20 feet

5. Is the well cased? Yes x No _____ Unknown _____
   If so, to what depth? _____
   What type of casing is used? galvanized casing

6. Is well screened? Yes _____ No _____ Unknown x

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) Household

8. Any other pertinent information? ½ horse power submersible pump. Approximately three years ago put in a water softener - treat with water softener.

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6)

2. Date well was dug 1945

3. Depth of well 50 feet originally; 1982-pulled out pipe and installed a submersible pump from 20 feet.

4. Depth to static water 20 feet - as of 1982

5. Is the well cased? Yes _____ No x Unknown _____
   If so, to what depth? _____
   What type of casing is used? No casing - submersible pump from 20 feet

6. Is well screened? Yes _____ No x Unknown _____

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) Household

8. Any other pertinent information? Water quality testing - up to 40.
   Clorox every now and then.

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6)

2. Date well was dug 1942

3. Depth of well 75 feet

4. Depth to static water Unknown

5. Is the well cased? Yes x No _____ Unknown _____
   If so, to what depth? _____
   What type of casing is used? steel

6. Is well screened? Yes _____ No _____ Unknown x

7. How much is the well pumped? (Only for residential use of for use in watering livestock?) Household

8. Any other pertinent information? No treatment. Pulled up piping above ground. Problems when it rains with water quality.

ATTACHMENT A

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT SUPPLEMENT SHEET

Instruction - This sheet is provided to give additional information in explanation of a question on the form T2070-3.

Corresponding number on form	Additional Remark and/or Explanation
VIII. U.	The following is FIT's recommended sampling plan (see attached sketches):

I. Off Site - Water course for drainage after leaving Air Center

Depth and type of sample: 1' deep sediment sample

Analysis performed: metals and cyanide and for phenols (SAS).

Justification for phenol analysis: Even though organic analysis in 1986 did not reveal phenols, phenols were detected in significant amounts in water and sediments in 1984. Also, because it is a semi-volatile and contaminants may still be coming from Air Center, analysis is recommended.

Sample No.	Location	Justification
*1	a) sediment b) water North eastern end of spillway leading into Woodlake Pond from Air Center	To determine presence of contaminants east of Rockwell Avenue
2	Strip of land projecting into drainage path (see photo #9)	Possible point of accumulation of contaminants
3	SE end of pond close to drainage inlet	Possible point for contamination not attributable to Air Center
4	NE edge of pond	Furthermost end of pond and possible point for accumulation

ATTACHMENT A

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT SUPPLEMENT SHEET

Instruction - This sheet is provided to give additional information in explanation of a question on the form T2070-3.

Corresponding number on form

VIII. U.

Additional Remark and/or Explanation

Sample No.	Location	Justification
5 & 6	Near both ends of spillway (photos 3 & 4)	To trace the migration of contaminants from lake into drainage path leading to swampy area.
7	Along the bend in the drainage path	Possible accumulation of contaminants
8 & 9	Swampy area to the NE of Woodlake Pond	To determine contamination into and out of swampy area
24	South of location #3	Background which may also give information on contamination due to residential areas

II. On-Site

Sample #	Location	Type & Depth of Sample	Analysis Required
10	NE corner of site	a) soil. 1' depth b) water sample	Metals and cyanides and phenols

Justification: Furthest point of contamination on-site. End of site drainage path.

11,12&13	Both sides of pipe and inlet to swampy area	soil. 1' depth	-do-

Justification: To determine the migration path of contaminants.

ATTACHMENT A

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT SUPPLEMENT SHEET

Instruction - This sheet is provided to give additional information in explanation of a question on the form T2070-3.

Corresponding number on form

VIII. U.

Additional Remark and/or Explanation

Sample #	Location	Type & Depth of Sample	Analysis Required
14	SE slope of lagoon into drainage ditch	soil. 1' depth	Metals and cyanides and phenols

Justification: Possible seepage from lagoon into drainage ditch.

15	Near Dead Tree	soil. 1' depth	-do-

Justification: Possible accumulation of contaminants may have caused this.

16	Breach in the berm	soil. 1' depth	-do-

Justification: Possible drainage path of contamination.

17	Probable location of lagoon	soil. a) 1' depth soil. b) 6' depth	-do-

Justification: Lagoon said to have contained contaminants and later filled up with soil.

18	Circular patch of dead vegetation on lagoon (photo #20	soil. a) 1' depth soil. b) 6' depth	-do-

Justification: -do-

ATTACHMENT A

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT SUPPLEMENT SHEET

Instruction - This sheet is provided to give additional information in explanation of a question on the form T2070-3.

Corresponding number on form VIII. U.

Additional Remark and/or Explanation

Sample #	Location	Type & Depth of Sample	Analysis Required
19	Probable location of lagoon (photo #13 and 15)	soil. a) 1' depth soil. b) 6' depth	-do-

Justification: -do-

20	Near concrete drainage pipe (photo #12)	soil. a) 1' depth	-do-

Justification: Possible contamination from hangers through pipe.

21	Circular patches on grass to the east of hanger (photo #21)	soil. 1' depth	-do-

Justification: Possible storage area for drums.

22	Underground storage tank (photo 19&20)	Medium concentration sediment. Bottom of tank.	Metals and cyanide, organic-volatiles, extractable (extractable and pesticides). Phenols.

Justification: Storage for stripper waste.

ATTACHMENT A

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT SUPPLEMENT SHEET

Instruction - This sheet is provided to give additional information in explanation of a question on the form T2070-3.

Corresponding number on form	Additional Remark and/or Explanation

VIII.U.

Sample #	Location	Type & Depth of Sample	Analysis Required
23	North of paint stripping hanger	soil. a) 1′ depth soil. b) 6′ depth	Metals and cyanide, organic - volatiles, extractable (extractables and pesticides), phenols

Justification: Background

Ground Water Sampling

(b) (9)	Residential Well (b) (6) Depth of well: 110′	Water	Metals and cyanides organic - volatiles, extractable (extractables and pesticides), phenols
26	City of Bethany Municipal Well #21 Depth of Well: 70.5′	Water	-do-
(b) (9)	Residential Well (b) (6) Depth of Well: 75′	Water	-do-
28	City of Bethany Municipal Well #23 Depth of Well: Unknown City of Bethany	Water	-do-

Justification: The above are drinking water wells within the 1-3 mile radius of site which are down gradient from site.

ATTACHMENT A

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT SUPPLEMENT SHEET

Instruction - This sheet is provided to give additional information in explanation of a question on the form T2070-3.

Corresponding number on form	Additional Remark and/or Explanation

VIII.U. (Cont'd)

Sample #	Location	Type & Depth of Sample	Analysis Required
(b) (9)	Residential Well (b) (6)	Water	Metals and cyanides, organic - volatiles, extractable (extractable and pesticides), phenols

Justification: Background water sample located to the north-northwest of site and approximately three to four miles from the site and upgradient from it.

The FIT recon team did not find wells other than the City of Bethany Well #23 within one mile of the site. Areas outside the Bethany city limits are supplied by Oklahoma City, which gets its water from Lake Hefner.

The drainage path was followed from Woodlake Pond to the swampy area into a series of ponds and then over Bluff Creek Canal to possibly Ski Island and Silver Lake. No sampling locations were chosen further than the swampy area to the NE of Woodlake Pond as there would be cross contamination from numerous drainage inlets and drainage paths into these ponds.

The possible location of lagoon was determined from cross checking aerial photos against the unusual soft and dried grass bottom observed at the site to the southeast of the water tank.

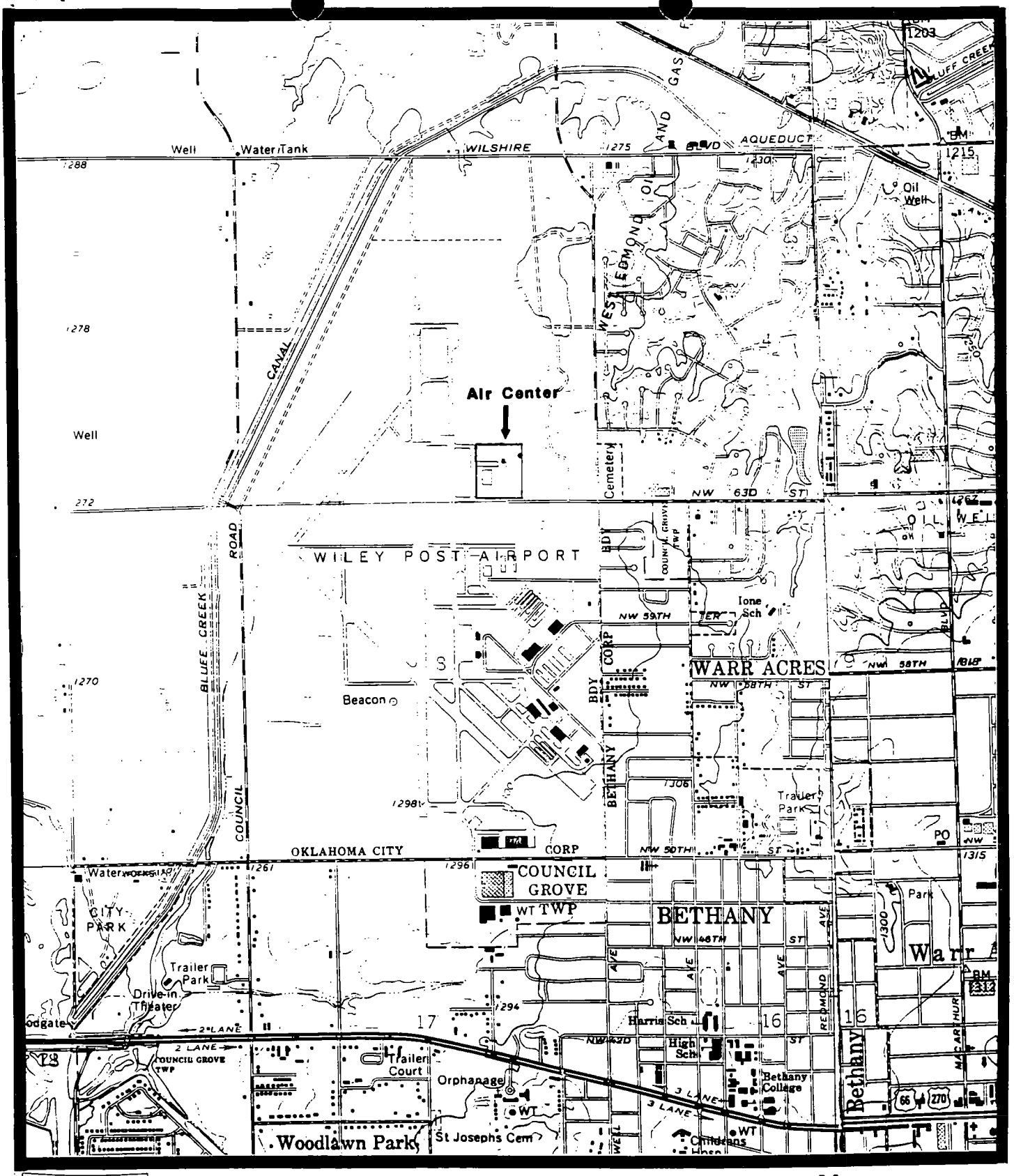
X.H.

No water wells were observed within a 1/4 mile radius of site. The closest well is located about 3/4 miles to the west of the site. This is a drinking water well belonging to the City of Bethany. The records show this well to have a static head of 42.2 feet.

There are residential drinking water wells within one to two miles to the south of the site, one to two miles to the southwest and two to three miles to the North of the site. The residential well survey forms are attached.

XIV.

The facility applied for a State Generator Disposal Plan on 10/17/83. It is not known whether any permit was issued, as the facility went out of business.



OKLAHOMA

QUADRANGLE LOCATION

U.S.G.S. 7.5 min. TOPOQUADRANGLES

TITLE : SITE LOCATION

SITE NAME : Air Center

Oklahoma City, Oklahoma

CERCLIS NO. : OKD980750319

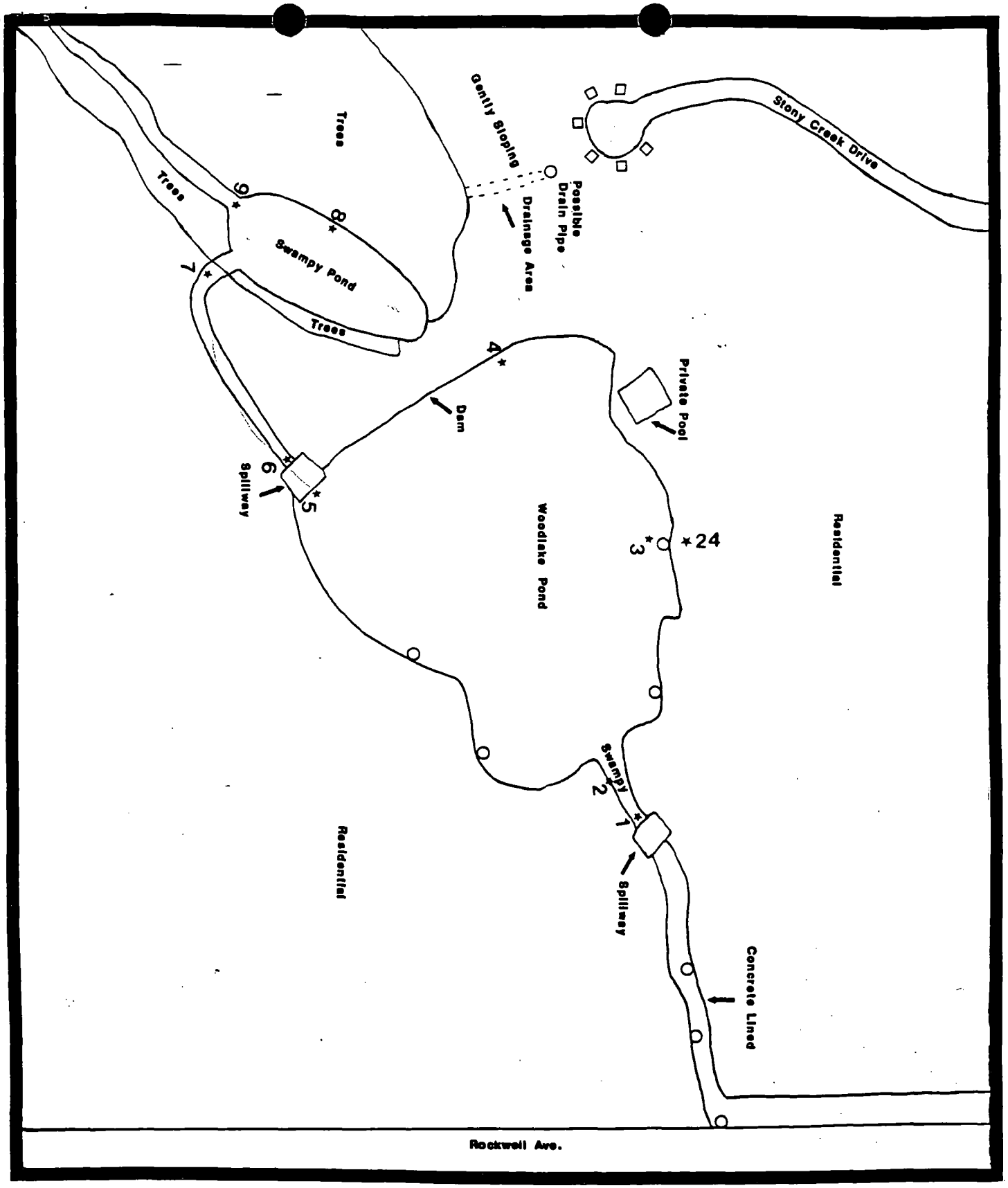
TDD NO. : F-6-8707-11

N

1 0 1/2 MILE

CONTOUR INTERVAL 10 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929



Water Course for Drainage Ditch after leaving Air Center

OKD980750319

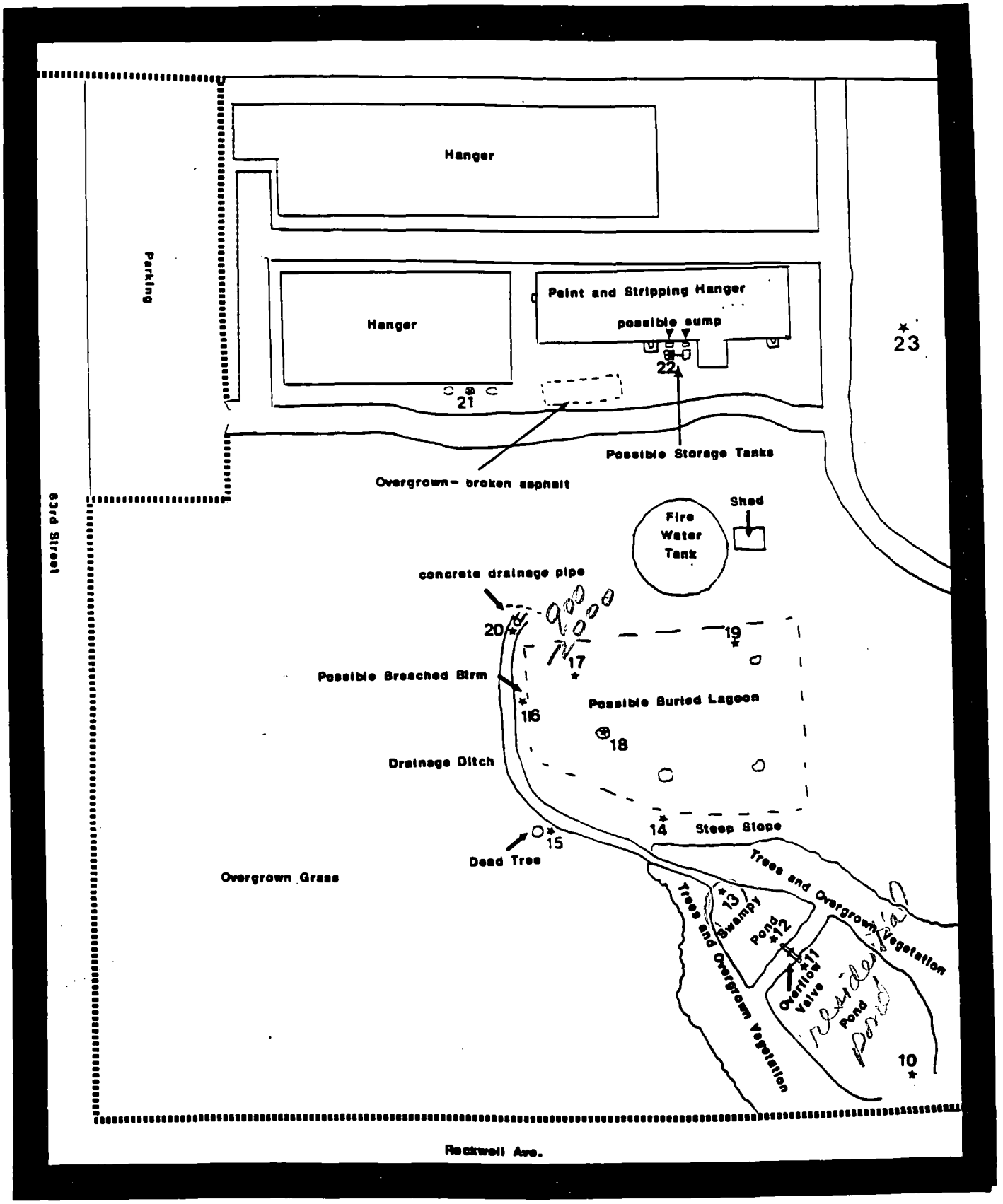
TDD# F-6-8707-11

N

○ Drainage Inlets from Surrounding Streets

★ Proposed Sampling Points

Not To Scale



Site Sketch
Air Center Inc.
Oklahoma City, Oklahoma
OKD980750319
TDD# F-6-8707-11
Site Inspection: 7-23-87

O Spots of Dead Vegetation
Fence Line
2 * Possible Sampling Points

N

Not To Scale

PHOTOGRAPHER [illegible] WITNESS [illegible] DATE [illegible] TIME [illegible] DIRECTION [illegible]

COMMENTS: [illegible]

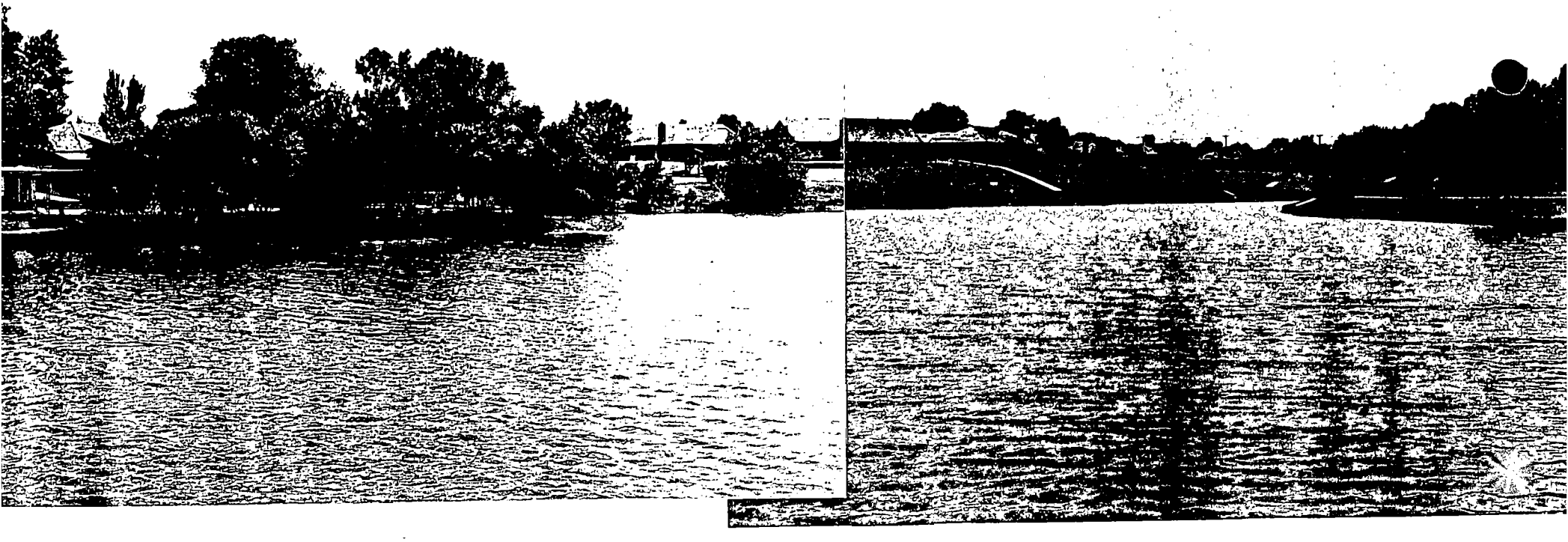


PHOTO # _____

PHOTOGRAPHER_____ WITNESS _____ DATE _____ TIME _____ DIRECTION _____

COMMENTS: _____

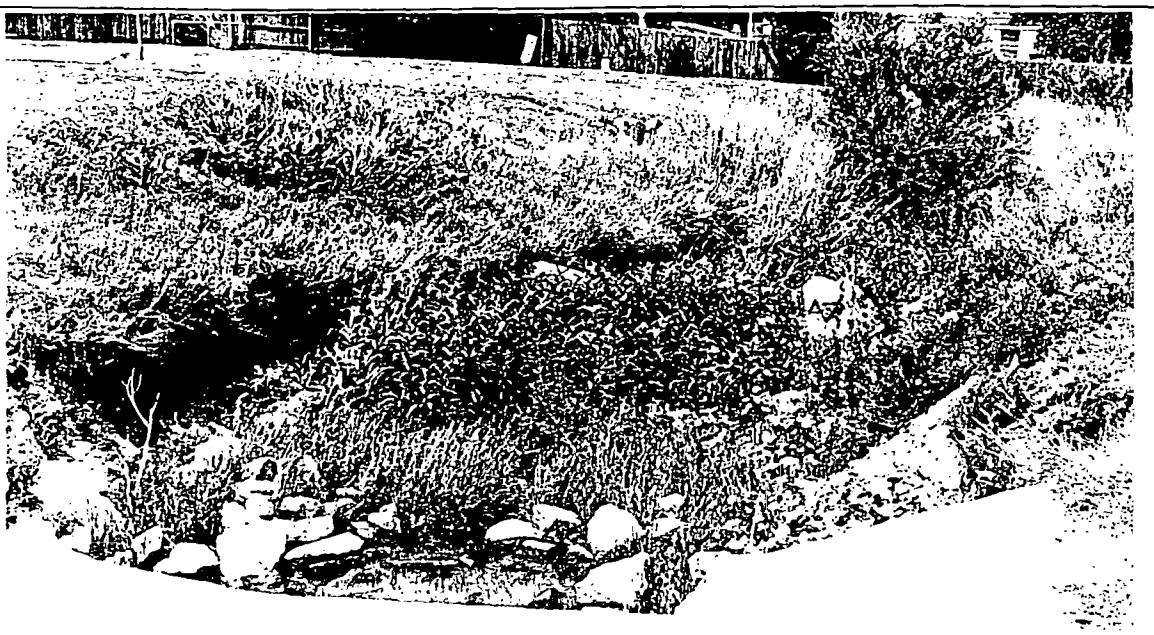


PHOTO # _____

PHOTOGRAPHER_____ WITNESS _____ DATE _____ TIME _____ DIRECTION _____

COMMENTS: _____

PHOTO # _____

PHOTOGRAPHER _____ WITNESS _____ DATE _____ TIME _____ DIRECTION _____

COMMENTS: _____

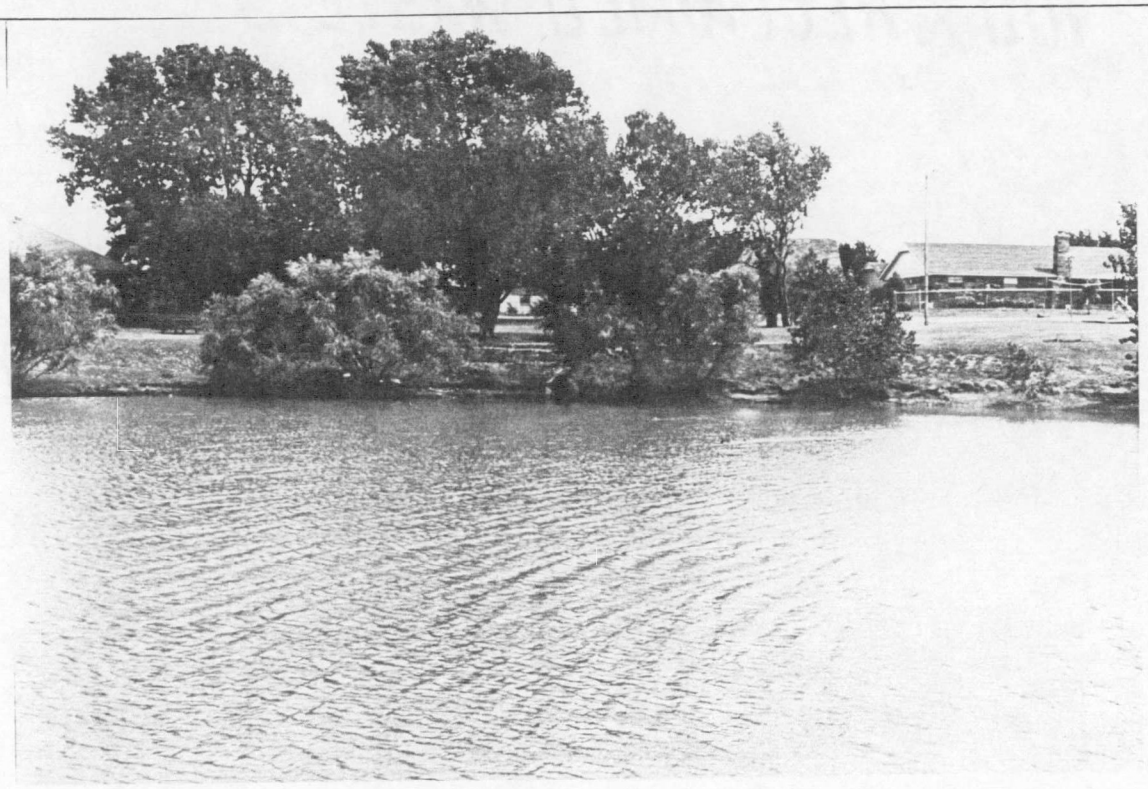


PHOTO # _____

PHOTOGRAPHER _____ WITNESS _____ DATE _____ TIME _____ DIRECTION _____

COMMENTS: _____

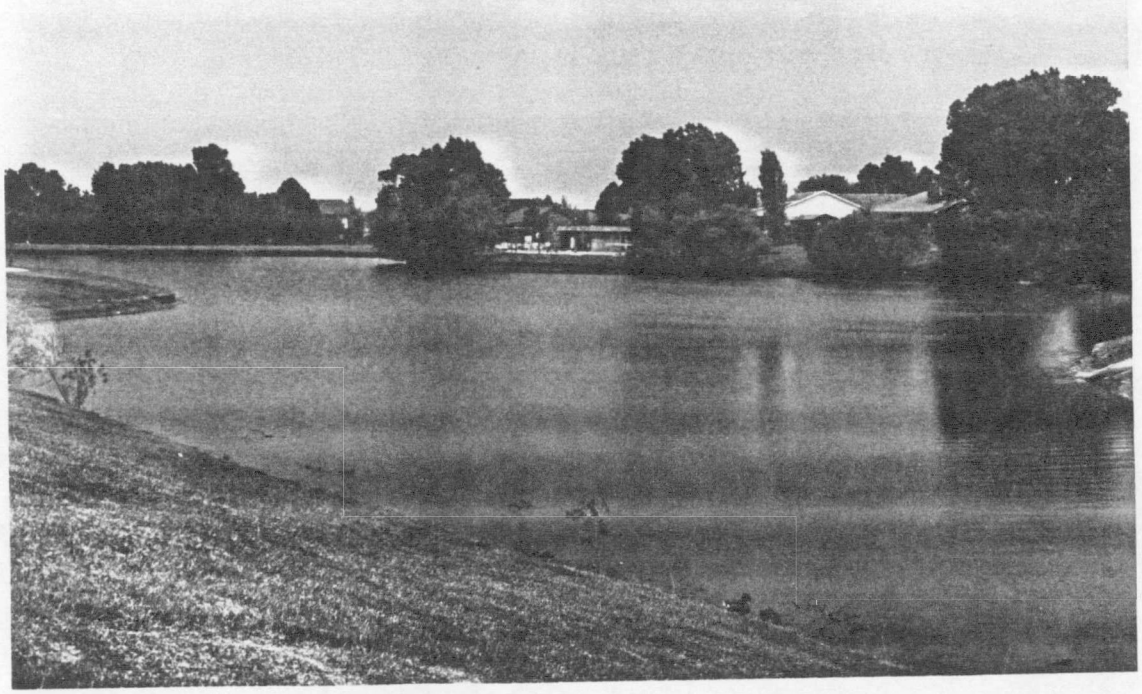


PHOTO # _____

PHOTOGRAPHER_____ WITNESS _____ DATE _____ TIME _____ DIRECTION _____

COMMENTS: _____

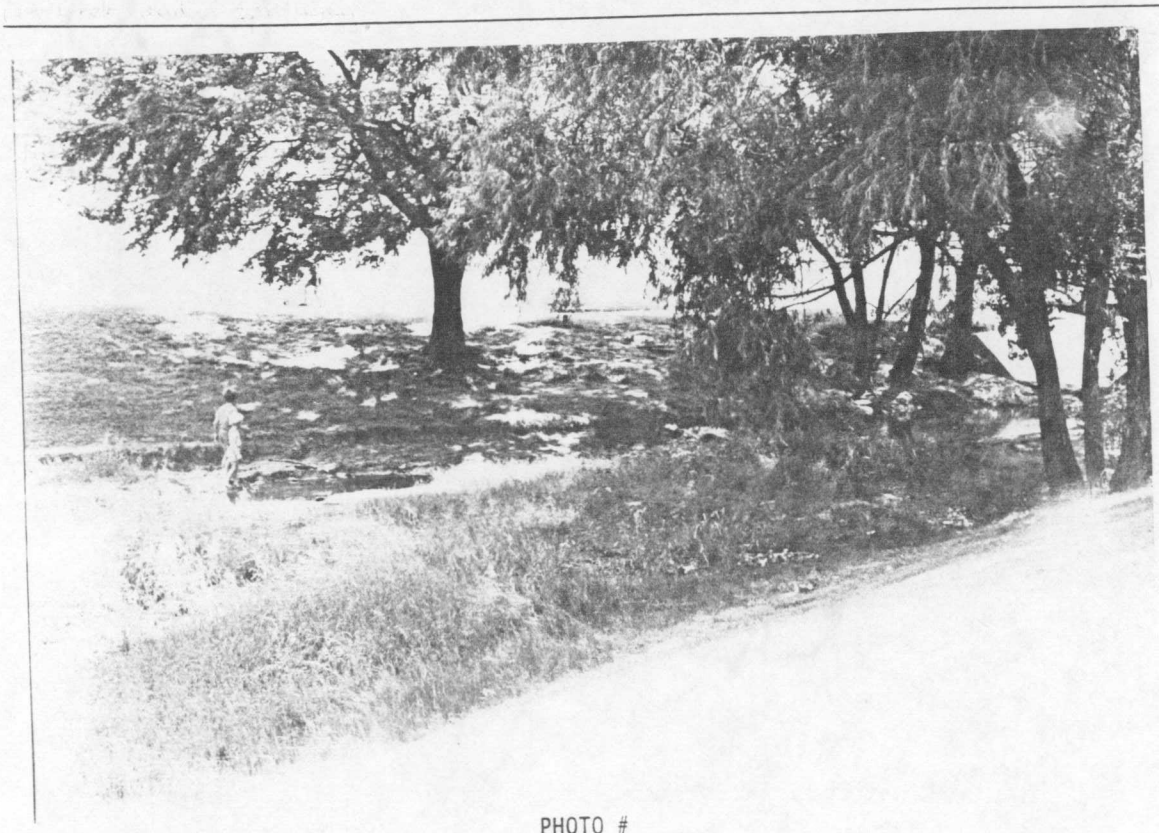


PHOTO # _____

PHOTOGRAPHER_____ WITNESS _____ DATE _____ TIME _____ DIRECTION _____

COMMENTS: _____

PHOTO # _____

OGRAPHER_____ WITNESS _____ DATE _____ TIME _____ DIRECTION _____

ENTS: _____

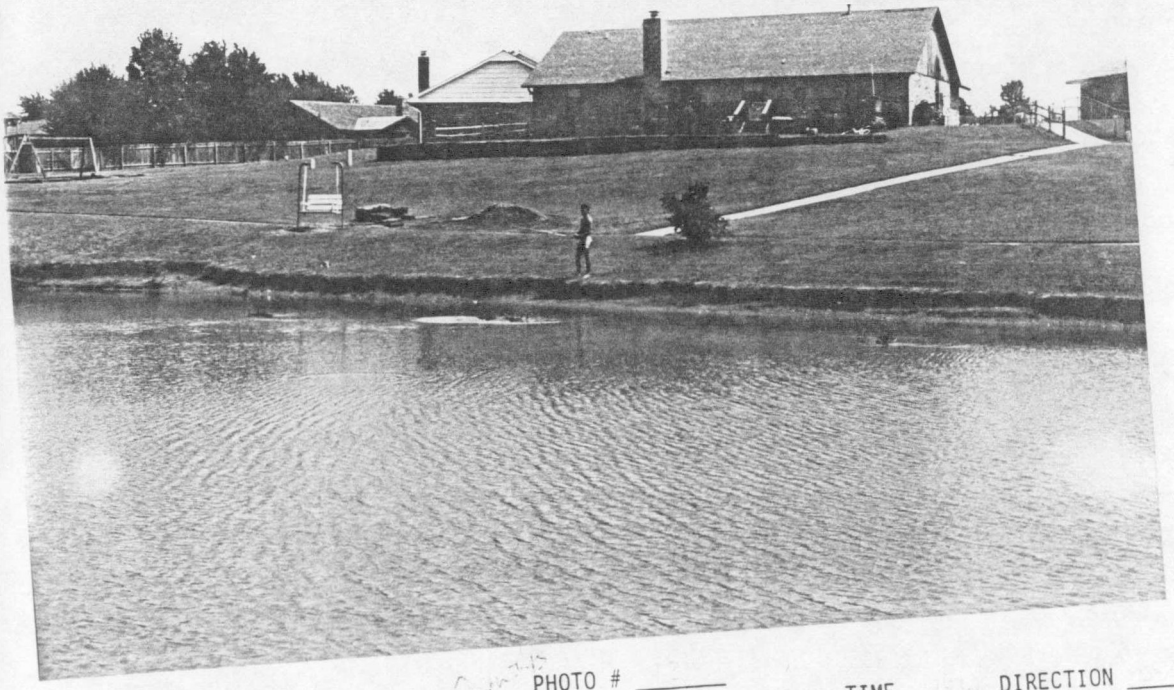
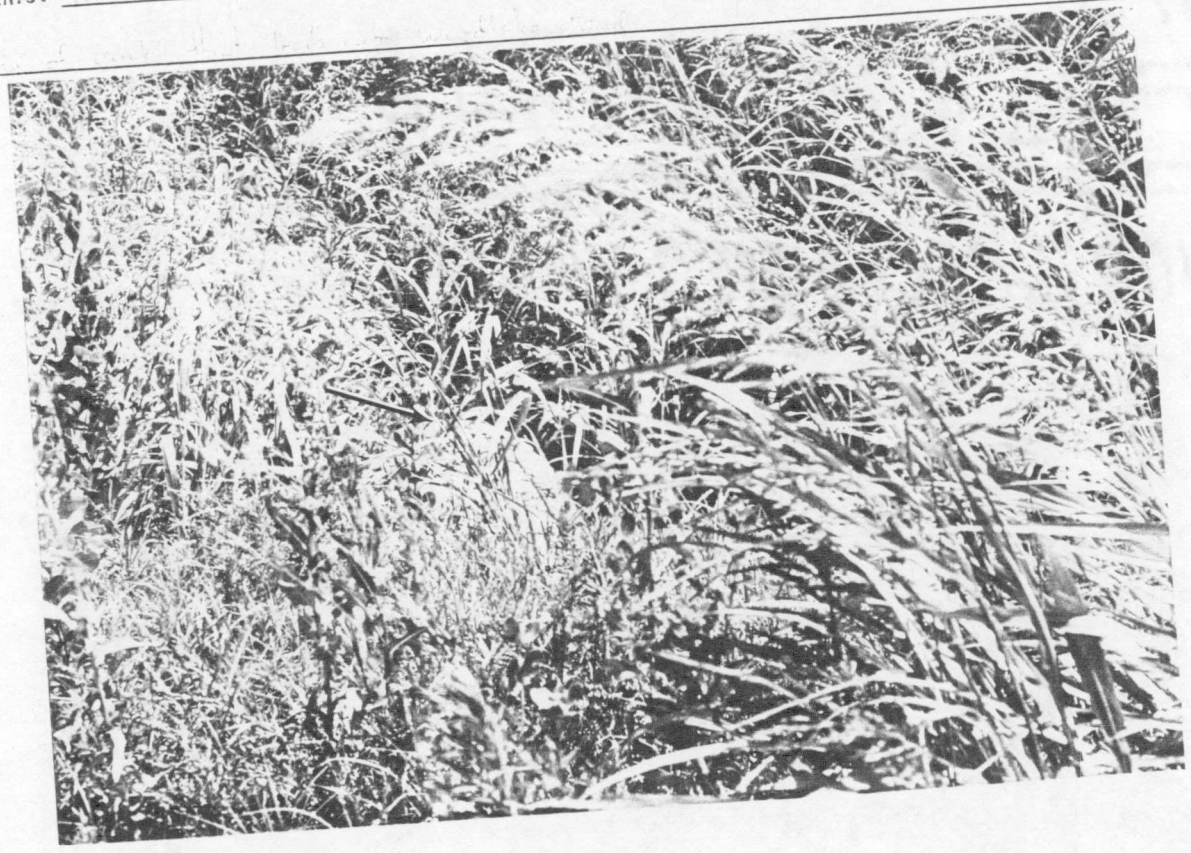


PHOTO # _____

PHOTOGRAPHER_____ WITNESS _____ DATE _____ TIME _____ DIRECTION _____

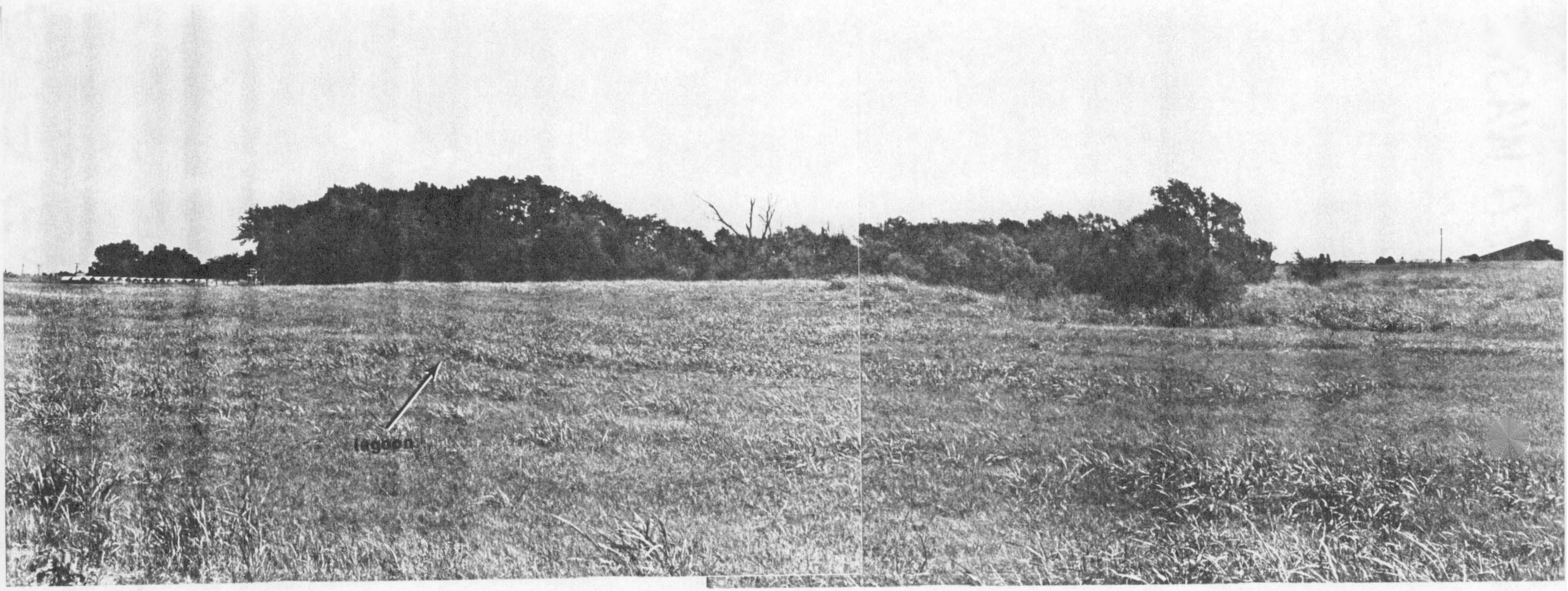
COMMENTS: _____



Photos: 13 and 14

PHOTOGRAPHER Debra Pawlak WITNESS Hollie Schaf DATE 7-23-[illegible] TIME 1300hr DIRECTION E to N

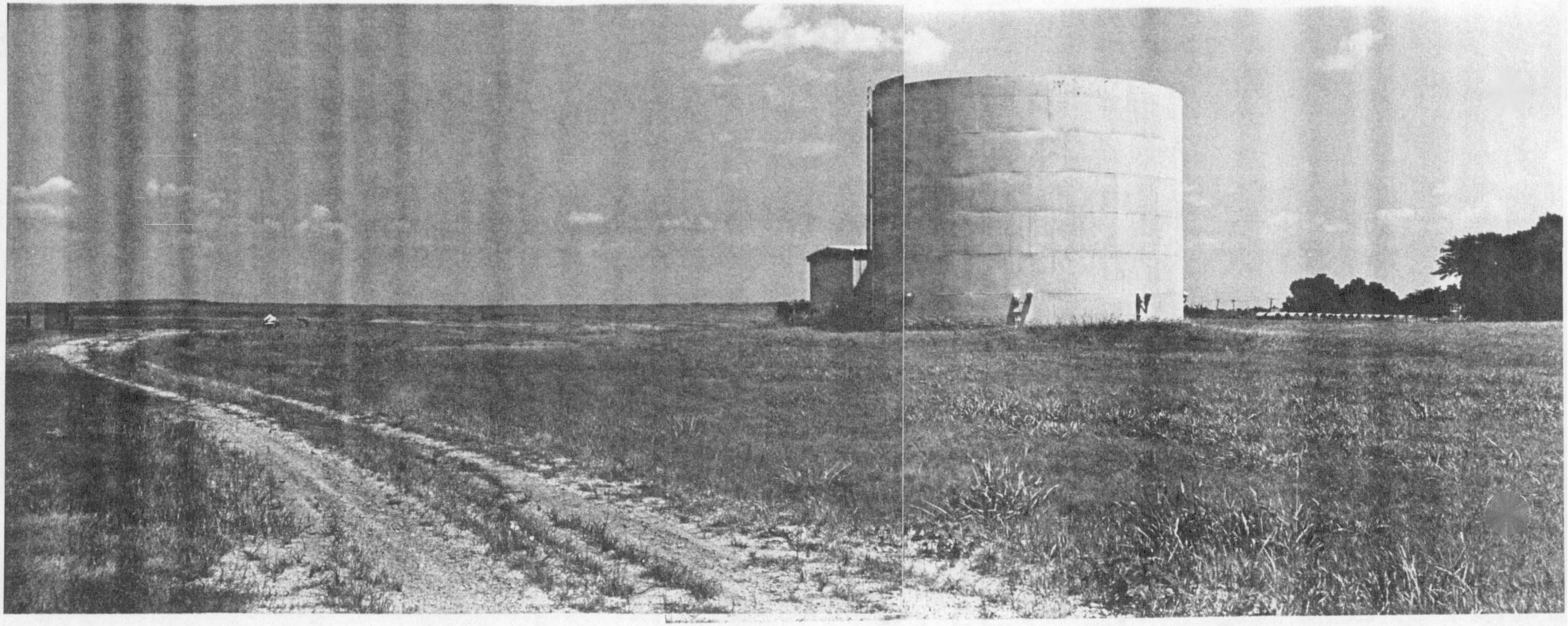
COMMENTS: Partial panorama (2 of 2) showing drainage area and possible buried lagoon location



photos 15 and 16

PHOTOGRAPHER [illegible] WITNESS [illegible] DATE 7-23-87 TIME 1300 hrs DIRECTION E to N

COMMENTS: Partial panorama (2 of 16) showing remains of possible [illegible] and fire water tank.



photos: 17 and 18

PHOTOGRAPHER [illegible] WITNESS [illegible] DATE [illegible] TIME 1300 DIRECTION E to N

COMMENTS: Partial panorama (2 of 6) showing painting and stripping hangars as well as the location of underground storage tanks.

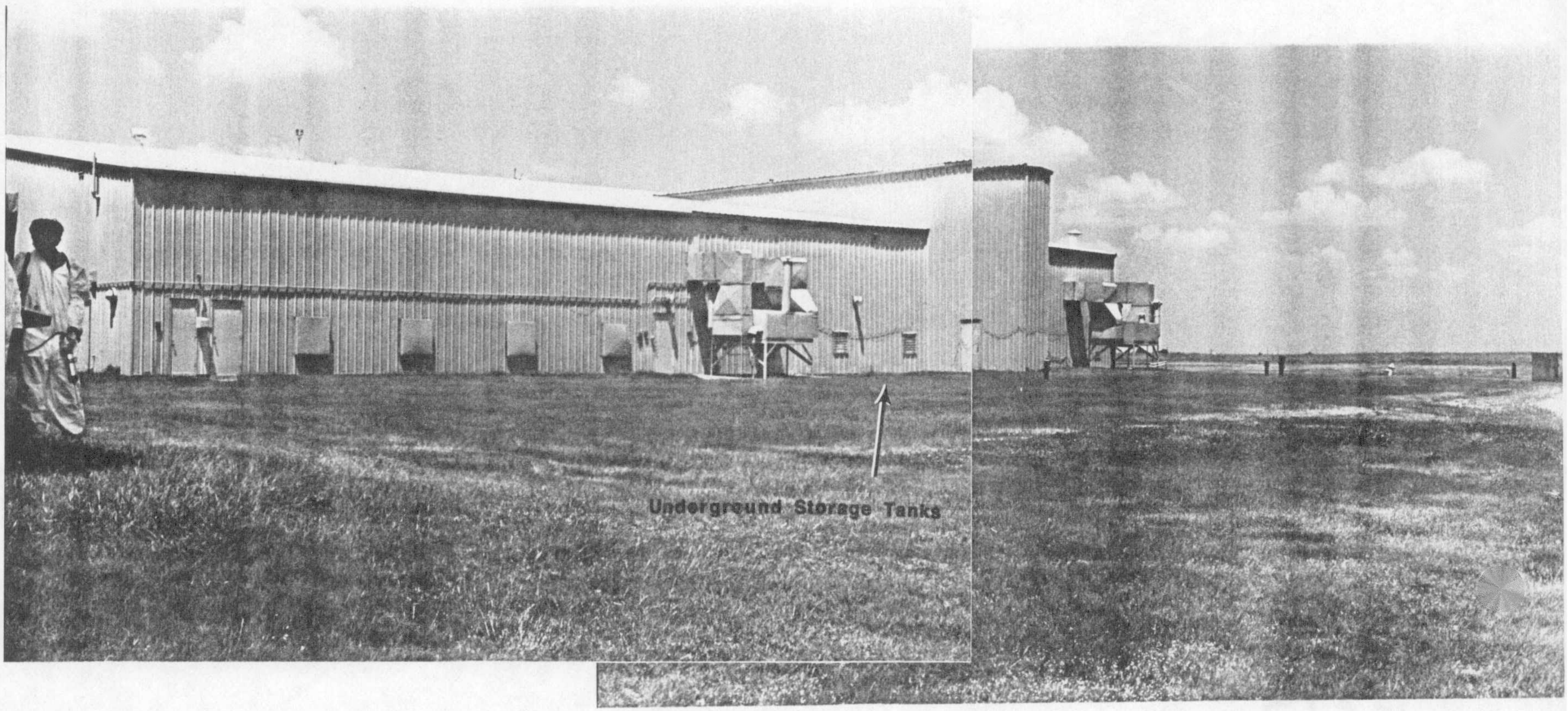


PHOTO # _____

PHOTOGRAPHER_____ WITNESS _____ DATE _____ TIME _____ DIRECTION _____

COMMENTS: _____

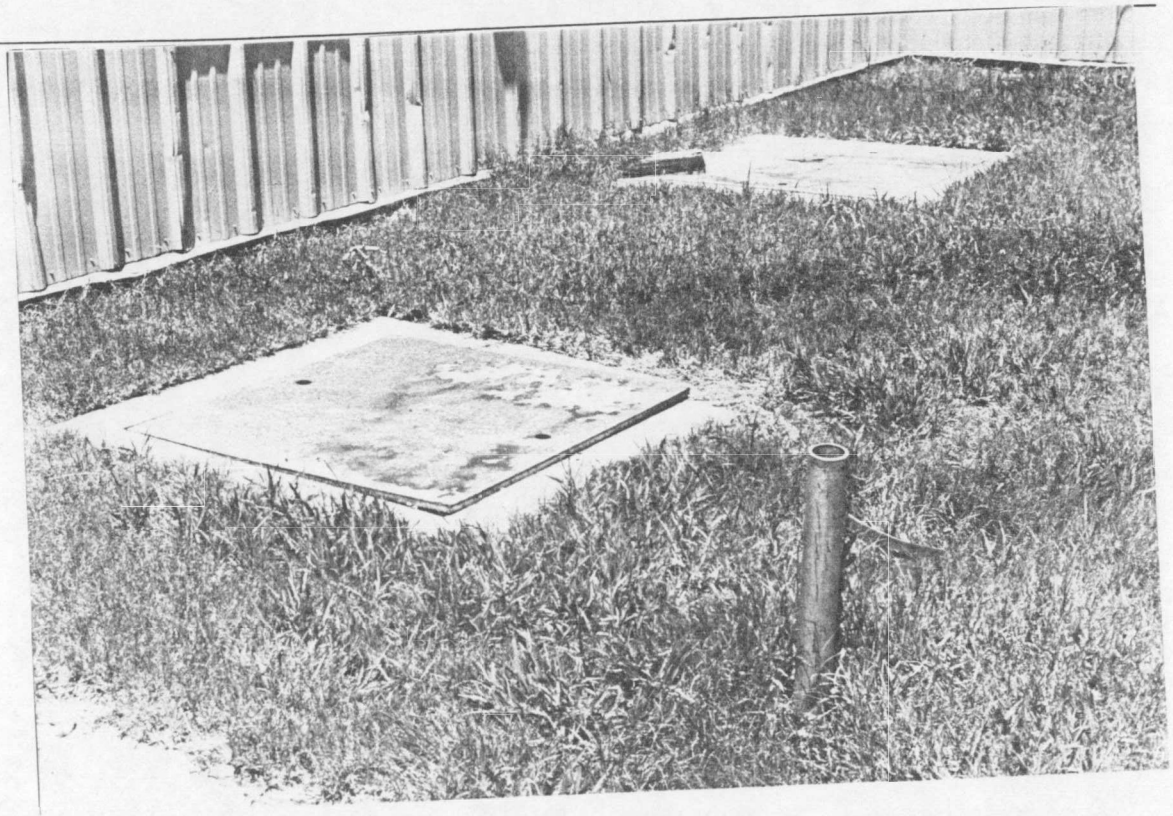


PHOTO # _____

PHOTOGRAPHER_____ WITNESS _____ DATE _____ TIME _____ DIRECTION _____

COMMENTS: _____

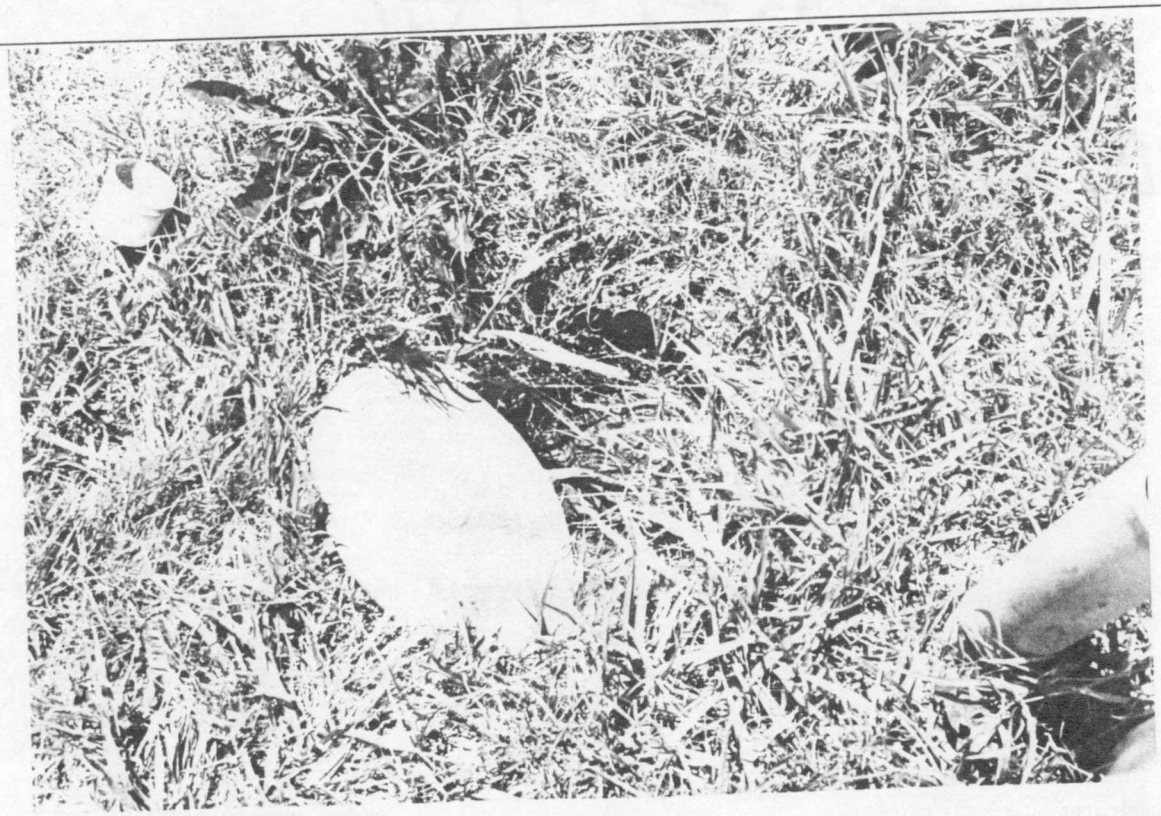


PHOTO # _____

PHOTOGRAPHER _____ WITNESS _____ DATE _____ TIME _____ DIRECTION _____

COMMENTS: _____

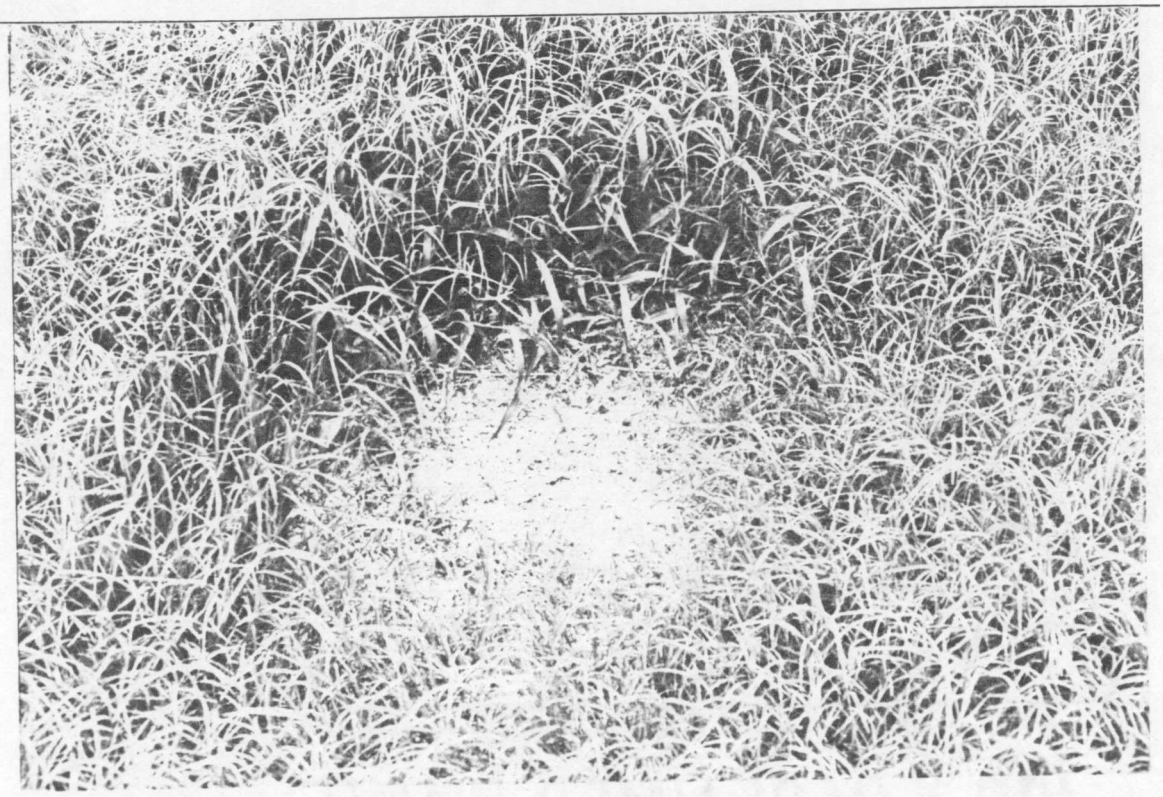


PHOTO # _____

PHOTOGRAPHER _____ WITNESS _____ DATE _____ TIME _____ DIRECTION _____

COMMENTS: _____

405 — 71— 7168

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MEM

Problem with Report Call ICF

RECEIVED
US EPA, DALLAS, TEXAS
1987 SEP 17 P 1:14
EMERGENCY RESPONSE BRANCH
6E-E

DATE: Sept. 16/87

SUBJECT: Potential Hazardous Waste Site

FROM: Dave Wineman, FIT RPO
Hazardous Waste Section (6E-SH)

Scott Thompson

TO: Martha McKee, Chief
Compliance Section (6H-ES)

Site Name : Air Center, Inc.

Location : Oklahoma City, OK

EPA ID No. : OKD 980750319

TDD No. : F06-8707-11

A. Deliverables :

1. Preliminary Assessment (Form 2070-2) attached ( )
2. Site Inspection Report (Form 2070-3) attached (X)
3. Sampling Inspection Report attached ( )
4. Other: ____________________ attached ( )

B. Were drinking water wells sampled ? Yes ( ) No ( )

C. Analytical Data :

1. None collected ( )
2. Field data ( )
3. Contract lab results attached ( )
4. Houston lab results attached ( )

D. Comments :

Recon inspection. A sampling plan is included in this report.

cc: (circle) Cabra 6H-E
Garza 6E-E
Taylor 6H-CE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
SUPERFUND SITE STRATEGY RECOMMENDATION - REGION 06

Filed in SA03

Site Name: Air Canter Inc., Wiley Post CERCLIS ID#: OKD980750319

Alias Site Names:

Address: 7300 NW 63rd Street

City/County or Parish/State/Zip Code: City of Oklahoma City Oklahoma / Oklahoma County / Oklahoma

Report Type, Date, and Author: ~~SIP / September 1994 / Fluor Daniel~~

RECOMMENDATION

(X) 1. No Further Remedial Action Planned (NFRAP)

( ) 2. Further Investigation Needed Under Superfund
( ) PA ( ) HRS Priority: ( ) High
( ) SI ( ) RA ( ) Low
( ) ESI ( ) RI/FS
( ) Other:
To be performed by:

( ) 3. Action Deferred to: ( ) RCRA ( ) NRC

NOTIFY AUTHORITY:

( ) Removal	( ) RCRA	( ) TSCA	( ) CAA	( ) SMCRA
( ) Remedial	( ) State	( ) NPDES	( ) NRC	( ) Resource Trustee:
( ) CERCLA Enforcement	( ) Federal Facility	( ) UIC	( ) SPCC	( ) Other:
SEND COPIES TO:	(x)6E-E	(x) 6W-SP	(x) ASTDR	(x) State Agency

SUPERFUND SITE STRATEGY RECOMMENDATION
Air Center Inc., Wiley Post

DISCUSSION: The Air Center Inc., Wiley Post site is a former aircraft stripping and painting facility. The site operated from 1973 to 1984. The site consisted of the building and three treatment lagoons. The lagoons contained waste water from run off from the operations. The lagoons have been filled with soil from airport operations. Sampling of soil in the lagoons indicated a release of chromium and solvent by-products.

HRS pathway analysis indicated the following site characteristics. The nearest well is 3/4 of a mile from the site. Sampling of wells in the area did not detect a release of contaminants. Due to the distance to the nearest well, migration of a significant concentration of contaminants is unlikely. Surface water flows into nearby Woodlake pond; however, sampling of the pond did not detect hazardous substances. Furthermore, since the lagoons have been filled, migration of significant concentrations of contaminants will not occur. The nearest residence is over a half a mile from the site. For this reason and the filling of the lagoons, a threat to public health via soil exposure and air migration pathways is not warranted.

Due to the lack of hazardous substances migration potential, the Air Center Inc., Wiley Post site does not meet the minimum criteria of a viable candidate for inclusion on the Superfund National Priorities List; therefore, the site is designated a disposition of No Further Remedial Action Planned (NFRAP), and at this time does not warrant further investigation under Superfund.

This site is being referred to The State of Oklahoma for any appropriate action under the states regulations.

APPROVALS:

Report Reviewed by: Lon Biasco (Site Assessment Manager) Signature: _____ Date: 10/21/94

Disposition Recommended by: Eddie A. Sierra (Section Chief) Signature: Eddie A. Sierra Date: 10/21/94

Disposition Approved by: Betty Williamson (Branch Chief) Signature: Sierra for BW Date: 10/21/94

FLUOR DANIEL ARCS TEAM

Members: Fluor Daniel, Inc.
I.T. Corporation
PEI Associates, Inc.
Life Systems, Inc.

Program Office:
12790 Merit Drive
Suite 200, LB 169
Dallas, TX 75251
Tel (214) 450-4100
Fax (214) 450-4101

September 13, 1994

FDI/ARCS # 2999

U.S. Environmental Protection Agency
Attn: Stacey Bennett, P.E. (6E-SH)
Work Assignment Manager
1445 Ross Avenue, Suite 1000
Dallas, Texas 75202

CONTRACT NO. 68-W9-0013
NARRATIVE REPORT / PRESCORE
AIR CENTER, INC. WILEY POST
EPA ID NO. OKD980750319
OKLAHOMA CITY, OKLAHOMA COUNTY, OKLAHOMA
SITE INSPECTION PRIORITIZATION
WORK ASSIGNMENT NO. 33-6JZZ

Dear Ms. Bennett:

Attached is the Narrative Report and supporting documentation for the above-referenced site. We have also attached a 3.5" disk with an electronic copy of the Narrative Report and PREscore. With your approval, this submittal constitutes completion of our work for this site.

Should you have questions or require additional information, please contact either of the undersigned at (214) 450-4100.

Sincerely,

Mengistu Lemma
Mengistu Lemma
ARCS Technical Manager

Robert K. Franke
ARCS Deputy Program Manager

ML:RF:kp

Attachments

REFERENCE 4

LETTER. Subject: Resampling of the Municipal Wells Located Near the Air Center, Inc. From: Ravinder Joseph, ICF Technology, Inc. To: David Wineman, EPA Region 6, RPO, October 24, 1988.

File "A"

Joan K. Leavitt, M.D.
Commissioner

OKLAHOMA STATE DEPARTMENT OF HEALTH

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W. A. "Tate" Taylor

P.O. BOX 53551
1000 N.E. TENTH
OKLAHOMA CITY, OK 73152

AN EQUAL OPPORTUNITY EMPLOYER

August 12, 1986

CERTIFIED MAIL

RECEIVED
AUG 18 1986
HAZARDOUS WASTE PROGRAMS BRANCH

Barbara Marrs
Gulfstream Aerospace Corporation
5001 North Rockwell
Bethany, OK 73008

Dear Ms. Marrs:

This is a **WARNING LETTER** promulgated as a result of an inspection of your facility on July 11, 1986. The purpose of the inspection was to determine if Gulfstream Aerospace Corporation was in compliance with the Oklahoma Rules and Regulations for Industrial Waste Management. The following areas of non-compliance were noted:

1. Gulfstream has failed to ship waste off-site within the ninety (90) day storage time limitation. Rule 3.18 (See 40 CFR 262.34) states that on-site storage by the generator for periods in excess of ninety (90) days shall not be allowed unless the generator meets the requirements of 40 CFR part 264 or 265, as applicable, as they have been incorporated by reference, and State permit requirements meeting the Standards of Chapter 8 of the Rules and 40 CFR Part 270.

   A generator who accumulates waste for more than ninety (90) days becomes an operator of a storage facility. Gulfstream has violated the rules for storage facilities, which include but are not limited to requirements for notification, permitting, and financial assurance, as well as the maintanence of a waste analysis plan, contingency plan, closure plan, inspection schedule and associated logs, personnel training records, and the posting of proper warning signs.

2. Gulfstream has failed to mark all of the storage containers and the storage tank, as required by Rule 3.16 (See 40 CFR 262.32(b) and 40 CFR 262.34(a)(2)). The hazardous waste label and start of accumulation date appeared only on a few of the containers to be shipped. It must be marked on all containers and the tank.

3. Gulfstream has failed to inspect the tank and storage containers, as required by Rules 7.8 and 7.9 (See 40 CFR 265.194 and 40 CFR 265.174). The containers and tank must be inspected at least weekly for signs of leakage or corrosion. In Gulfstream's contingency plan is a copy of a containers inspection log; however, this form has not been used. Neither the containers nor tank are inspected. No log exists for inspecting the tank or other plant safety and security devices.

4. Gulfstream has failed to include the tank closure in the facility closure plan, as required by Rule 7.9 (See 40 CFR 265.112). The closure plan must include steps to close the facility, estimate of maximum inventory of wastes at the facility, list steps needed to decontaminate equipment, and expected year of closure with a schedule of closure. The closure plan must be revised to also include any changes in facility design or operation. Additionally, 40 CFR 265.142 requires

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Mailed 8/13/86 SR

that the cost estimate for closure be adjusted annually. Gulfstream's closure cost figures need to include the tank closure and increased cost/inflation, since the plan was written in 1982.

5. Gulfstream has failed to meet the personnel training and recordkeeping requirements of Rule 7.1.6 (See CFR 265.16). 40 CFR 265.16 requires that:

   1. facility personnel complete a training program,

   2. the program be directed by a person trained in hazardous waste management procedures,

   3. the program be designed to ensure that personnel are able to effectively respond to emergencies,

   4. personnel be trained within six (6) months of employment and this training reviewed annually,

   5. training records be maintained at the facility.

   The training records must contain:

   a) job title for each position related to controlled industrial waste and the name of each employee filling a position,

   b) written job description for each job title, including the requisite skill, education or other equivalent education, and duties of personnel assigned to each position,

   c) description of type and amount of both introductory and continuing training that will be given to each person filling a position, and

   d) records that document that the required training has been given to or completed by facility personnel.

6. Gulfstream has failed to provide local authorities with copies of the contingency plan, as required by Rule 7.1.6 (See 40 CFR 265.53). The copies have not been sent and no documentation is provided to demonstrate receipt by local emergency response agencies.

7. Gulfstream has not included in its contingency plan the required emergency coordinator information under Rule 7.1.6 (See 40 CFR 265.52(d)). A list of names, addresses and phone numbers (office and home) of all persons qualified to act as emergency coordinator must be included in the contingency plan, and the person acting as primary coordinator must be identified.

8. Gulfstream must amend its contingency plan in order to comply with Rule 7.1.6 (See 40 CFR 265.52 and 40 CFR 265.56). In amending the plan the following areas need improvement:

   a. Emergencies involving the storage tank must be addressed.

   b. More detail is needed regarding the list of emergency equipment, which must include the location of of each item and its capabilities.

   c. Evacuation routes and alternate routes need to be addressed.

   d. The map of the facility contains extraneous information and does not depict the currently used waste storage areas.

   e. Page 3 of the text says the storage area is for waste kept in excess of 90 days. This should read not in excess of 90 days.

   f. Appendix I of the plan does not state that the Director of the Oklahoma State Department of Health, Industrial Waste Division will receive the outlined incident report.

   g. Appendix G states that amendments to the contingency plan will be made six (6) months after review. The regulations require that these amendments be made immediately.

9. Gulfstream has contaminated the environment as the result of an accidental acid spill onto the ground. In addition to the spill the improper handling of lead contaminated foundry sand has prompted the need for an environmental clean-up plan under the provisions of Chapter 6 of the Rules and Regulations. Lead and chromium contaminated soil must be managed and disposed of as controlled industrial waste. The test results of samples taken after the spill are included in the attached inspection report.

The above-mentioned items are serious violations of the Oklahoma Controlled Industrial Waste Disposal Act and the Rules and Regulations promulgated pursuant to the Act. Please take all necessary actions to correct these violations within thirty (30) days of receipt of this letter. You must notify us of your intentions with regards to item number one above. If you wish to operate as a storage facility, all of the referenced requirements of Rule 3.18 must be met.

Immediately commence proper labeling and dating of your containers and storage tank. Perform required inspections and amend the facility closure plan. Implement a personnel training program and appoint an emergency coordinator. Amend the contingency plan and provide copies to local authorities. Establish-in writing-procedures implemented to clean up contaminated soil. Laboratory analyses show the soil to be EP toxic for lead and chromium; as such, this soil is to be disposed of as controlled industrial waste.

Failure to comply with the directives of this warning letter may subject Gulfstream Aerospace Corporation to further enforcement action, which may include an administrative order assessing penalties.

If you have any questions or require further information regarding this matter, please contact Lynne Doty or Mr. Ken E. Raymond of my staff at (405) 271-5338.

Very truly yours,

For Donald A. Hensch, P.E., Director
Industrial Waste Division

DAH/KER/LD/sc
LDI

Enclosure: Checklist

cc: Buddy Parr (6H-HP)
U.S. EPA
Region VI

Gulfstream 7/11/86

Generator Only

Checklist Narrative

Item

1.C The Contingency plan contains an outline for a personnel training program. This outline however

2.0 has not been implemented. A person trained in hazardous waste management procedures is not

3.0 directing a training program. As no training program is carried out there are no training records and annual reviews are non-existent.

B-1 On May 22, 1986 Gulfstream reported a waste spill of hydrofluoric and chromic acids onto the ground. The soil was neutralized and removed to storage bins. Removed soil was EP Toxic for Chromium. In situ soil showed lead contamination from foundry sand disposal which as yet has not been removed and is EP toxic. See narrative to generator checklist item B.1 & B.2.

C-3.C The Contingency plan does not spell out the names and addresses or phone numbers for the

C.3.d emergency coordinators. More details are needed regarding the list of emergency equipment to include the locations of each item and the item

C.3.2 capabilities. Evacuation routes and alternate routes are not marked on the facility Contingency map. The map contains extraneous information and does not

Gulfstream 7/11/86

Generators Only Narrative Cont

Item VI

depict the currently used waste storage areas. The text needs to include the storage tank which was added since the plan was written in 1982. The text of the contingency plan (page 3) states the storage area for containers is used for waste remaining on access of 90 days. The sentence should read not in excess of 90 days. Appendix E of the Contingency plan has an inspection form for the container storage area but not one for inspecting the tank and safety and emergency equipment. Appendix I lists the agencies who are to receive incident reports; the Director of CDH Industrial Waste division was left off this list. Appendix G States ammendments will be made to the contingency plan 6 months after review, the regulations require that ammendments be made immediately. This contingency plan must be
C.5 updated. Local authorities have not been provided a copy of the contingency plan - they must be provided an ammended version as the existing plan is out of date.

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Area of N/C

l. Transporter's telephone number.
m. Secondary transporter information (if applicable)
n. Disposal facility name
o. Disposal facility EPA ID number
p. Disposal facility address
q. Facility's telephone number
r. Alternate facility information (if any)
s. D.O.T. description of waste(s)
t. Total quantity of each hazardous waste by units of weight or volume, and the type and number of containers as loaded onto vehicle.
u. EPA waste code (if applicable)
w. OK waste code

____ 6. (a) Did generator obtain hadwritten signature and date of acceptance from initial transporter? ✓ Yes ____ No

(b) Who signed and dated for transporter? (Rule 4.3.1)
Name Various Title Truck driver

____ 7. Does generator retain one copy of manifest signed by generator and transporter? (Rule 3.9) ✓ Yes ____ No

____ 8. Do returned copies of manifest include facility owner/ operator signature and date of acceptance?(Rule 3.10) ✓ Yes ____ No

____ 9. If copy of manifest from facility was not returned within 45 days, did generator file an exception report? (Rule 3.10 et.seq.) NA Yes ____ No

(a) If yes, did it contain the following information

1) Legible copy of manifest NA Yes ____ No

AND

2) Cover letter explaining generator efforts to locate waste. NA
____ Yes ____ No

____ 10. Does (will) generator retain both copies of manifest for 3 years? (Rule 1.3.1.5.1) ✓ Yes ____ No

Section D Pre-Transport Requirements
(THESE REQUIREMENTS APPLY ONLY TO CONTAINERS THAT ARE BEING OFFERED FOR SHIPMENT OFF-SITE)

1. Does generator package waste? ✓ Yes ____ No

If no, skip the rest of Section D
If yes, complete the following questions

____ 2. Does generator package waste in accordance with 49 CFR 173, 178, and 179? (DOT requirements)(Rule 3.16(a) IAW 262.30 - Packaging) ✓ Yes ____ No

Area of N/C

___ 3. Inspect containers to be shipped. (Rule 3.16(a))

a. Are containers to be shipped leaking or corroding or bulging? ___Yes ✓No

b. Use narrative explanations sheet to describe containers and condition.

c. Is there evidence of heat generation from incompatible wates in the containers? ___Yes ✓No

___ 4. Does the generator follow DOT labeling requirements before transport in accordance with 49 CFR 172? (Rule 3.16(c) IAW 262.31 labeling) USPCI does Labels at the facility ✓Yes ___No

___ 5. Does the generator mark each package before transport in accordance with 49 CFR 172? (Rule 3.16(c) IAW 262.32 -Marking) ✓Yes ___No

✓ (6.) Is each container of 110 gallons or less marked with the following label before transport? (Rule 3.16(c) IAW 262.32 - Marking) not all ___Yes ✓No

Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency

Generator's Name and Address _____

_____

Manifest Document Number _____

7. If there are any vechicles present on site loading or unloading hazardous waste, inspect for presence of placards. Note this instance on narrative explanation sheet. (Rule 3.16(d) IAW 262.33) NA

SECTION E - Accumulation Time
(Rule 3.17 and 3.18 IAW 262.34 - Accumulation Time)

1. Is facility a permitted storage facility or does the facility have interim status? ___Yes ✓No

2. If no:

✓ (a.) Is hazardous waste shipped off-site within 90 days Have been acceptions see narrative ___Yes ✓No

b. Are containers used to store waste? ✓Yes ___No

✓ (1) Is the beginning date of accumulation time clearly indicated ? (Rule ~~3.15~~ 3.16b) ___Yes ✓No

Area of N/C

c. (1) Does generator inspect containers for leakage or corrosion? (Rule 3.16(a) IAW 265.174 - Inspections) re-use product drum to ship waste, USPCI provides overpacks ____Yes ✓No

d. (1) Does generator handle ignitable or reactive waste? ✓Yes ____No

(2) If yes, does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) inside facility's property line? (Rule 3.16(a) IAW 265.176 - Special Requirements for Ignitable or Reactive Wastes) ✓Yes ____No

NOTE: If generator accumulates waste on-site for less than 90 days, fill out Generator Only Supplemental Checklist.

3. Describe storage area. ~~Use photos and~~ narrative ~~explantion sheet.~~: Concrete slab floor inside of Storage building WHA Special area roped off.

Section F-Recordkeeping and Records

1. Is generator keeping the following reports? (Rule 1.2.1.5.1 & 3.12 IAW 262.41 - Recorkeeping)(Note: the following must be kept for a minimum of three (3) years.)

a. Manifests and signed copies from designated facilities? ✓Yes ____No

b. Quarterly Reports (Rule 3.12, 3.7) ✓Yes ____No

c. Exception Reports (Rule 3.10) NA Yes ____No

d. Test results where applicable. ✓Yes ____No

e. Biennial Reports for each odd number year (Rule 3.12) ✓Yes ____No

2. Where are records kept (at facility or elsewhere)?

At facility Office

3. Who is in charge of keeping the records?

Name Gayla Williams Title Records Clerk/Dispatches

Section G. - Special Condition

1. Has generator received from or transported to a foreign source any hazardous waste? (Rule 3.11 IAW 262.50 - International Shipments) ____Yes ✓No

Area of N/C

If yes,

_____ a. Has he filed a notice with the Director — NA _____Yes _____No

_____ b. Is this waste manifested and signed by Foreign Consignee? _____Yes _____No

_____ c. If generator transported wastes out of the country has he received confirmation of delivered shipment? _____Yes _____No

PLANT Gulfstream Aerospace

DATE July 11, 1986

____ Yes ✓ No

?ATOR ONLY SUPPLEMENTAL CHECKLIST

:s for Generators which accumulate at least ~~1000 k.g.~~
____ (1.) Tanks or ____ (2.) Containers
:re Over ~~90 Days~~ (Required by Rule 3.16)

✓ Yes ____ No

:tion of 90 Day Storage Requirement

)

operator have a personnel training program
:re applicable: (IAW 265.16 - Personnel Training)

✓ Yes ____ No

:or using, inspecting, repairing, and
:ility emergency equipment. ✓ Yes ____ No

:ers for automatic waste feed cut-off N/A Yes ____ No

✓ Yes ____ No

:or using communications or alarm systems. ✓ Yes ____ No

✓ Yes ____ NO

fires or explosions. ✓ Yes ____ No

groundwater contamination incidents. ✓ Yes ____ No

✓ Yes ____ No

: operations. ✓ Yes ____ No

:ogram directed by a person trained in
management procedures?
:rsonnel Training) ____ Yes ✓ No

operator maintain Personnel Training records
(IAW 265.16--Personnel Training) ____ Yes ✓ No

:ey include:

:e for each position related to controlled
:l waste management and the name of each
:e filling a position? N/A ____ Yes ____ No

✓ Yes ____ No

job description for each job title including
:isite skill, education or other equivalent
:on and duties of personnel assigned to each
:? ____ Yes ____ No

:tion of type and amount of both introductory
:tinuing training that will be given to each
:filling a position. ____ Yes ____ No

:al ____ Yes ✓ No

:s that document that the required training
:n given to or completed by facility
:nel? ____ Yes ✓ ____ No

✓ Yes ____ No

Area of
N/C

5. In the case that more than one police or fire department might respond, is there a designated primary authority? (IAW 265.37 -Arrangements with local authorities) ✓ Yes ____ No

a) If yes, indicate primary authority Wiley Post Airport Fire Dept.

b) Is the fire department a city or volunteer fire department? City

6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors and equipment suppliers? (IAW 265.37 - Arrangements with local authorities) ✓ Yes ____ No

Are they readily available to the emergency coordinator? ✓ Yes ____ No

7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? ✓ Yes ____ No

If no, has the owner/operator attempted to do this? NA Yes ____ No

8. If the State, or local authorities decline to enter into the above referenced agreements, has this situation been entered in the operating record? (IAW 265.37 -Arrangements with local authorities) NA Yes ____ No

Section C - Contingency Plan and Emergency Procedures

1. Does the facility have a contingency plan? (IAW 265.51 - Purpose and implementation of Contingency Plan) ✓ Yes ____ No

a) If yes, is it maintained at the facility? (IAW 265.53 -Copies of Contingency Plan) ✓ Yes ____ No

2. Is the contingency plan a revised SPCC Plan? (IAW 265.52 - Content of Contingency Plan)) ____ Yes ✓ No

3. Does the contingency plan contain the following information: (IAW 265.52 - Content of Contingency Plan) ✓ Yes ____ No

a) A description of the actions to be taken by facility personnel in the event of fire, explosion, or release of controlled industrial waste? ✓ Yes ____ No

b) A description of the arrangements with local authorities? ✓ Yes ____ No

Area of N/C

c) A list of names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator? ____Yes ✓No

d) A list of all emergency equipment including 1) the location of each item 2) a physical description of each item on the list and 3) an outline of each item's capabilities? Partial ____Yes ✓No

e) An evacuation plan where there is a possibility that evacuation could be necessary including ____Yes ✓No

1) signals to begin evacuation
2) evacuation routes
3) alternate evacuation routes

____ 4. Is there an emergency coordinator on site or within short driving distance of the plant at all times? (IAW 265.55 - Emergency Coordinator) ✓Yes ____No

✓ 5. Has the facility supplied all local authorities and State response teams with a copy of the contingency plan? (IAW 265.53 - Copies of Contingency Plan) ____Yes ✓No

____ 6. Has the contingency plan ever been implemented? (IAW 265.56 - Emergency Procedures) ✓Yes ____No

a) If yes, was a written report submitted to the Director within 15 days after the incident? N/A Yes ____No

FACILITY Gulf Stream Coach

DATE 7/11/86

CONTAINERS STORAGE CHECKLIST
(Rule 7.1.6 & 7.8)

Area of N/C			
	1.	Does the facility store hazardous waste in containers? (IAW 265.170) (Includes hoppers and gondolas)	✓ Yes ___ No
		If no, do not complete this form.	
___	2.	Are the containers in good condition? (check for leaks, corrosion, bulges, etc.)	✓ Yes ___ No
___	3.	If a container is found to be leaking, does the operator transfer the hazardous waste from the leaking container? (IAW 265.171)	✓ Yes ___ No
___	4.	Is the waste compatible with the containers and/or its liner? (IAW 265.172)	✓ Yes ___ No
		If no, explain in narrative.	
___	5.	Are the stored containers closed?	✓ Yes ___ No
		If no, explain in narrative.	
___	6.	Are containers holding hazardous waste opened, handled, or stored in such a manner as to cause the container to rupture or leak? (IAW 265.173)	___ Yes ✓ No
		If yes, explain in narrative.	
✓	(7.)	Are areas where containers are stored inspected at least weekly looking for container leaks and for deterioration caused by corrosion or other factors? (IAW 265.173)	___ Yes ✓ No
___	8.	Are containers holding ignitible or reactive wastes located at least 15 meters (150 feet) from the facility property line? (IAW 265.176)	✓ Yes ___ No
___	9.	Are incompatible wastes stored in the same containers or placed in an unwashed container that previously contained an incompatible waste or material? (IAW 265.177)	___ Yes ✓ No
		If yes, explain in narrative.	
___	10.	Are containers holding incompatible wastes kept apart by physical barrier or sufficient distance? (IAW 265.177)	✓ Yes ___ NO
		If no, explain in narrative.	

Gulfstream 7-11-86

Container Checklist Narrative

Item

x 7. The container storage area is not inspected on a regular basis for signs of leaks or deterioration. The start of accumulation date has not been marked on each container.

FACILITY: Gulfstream

DATE: 7/11/96

TANKS CHECKLIST
(Rule 7.9 & 7.1.6.)

Area of N/C

NOTE: If multiple tanks exist, list each tank and specify compliance or non-compliance. Complete an individual checklist for each tank not in compliance and collective checklist for those in compliance.

1. Are there any tanks which are not being used which the facility no longer plans to use? ____YES ✓NO

   a. If yes, has all hazardous waste and hazardous waste residue been removed from these tanks, discharge control equipment, and discharge confinement structures? NA YES ____NO

2. Are tanks presently used to treat or store waste? ✓YES ____NO

   a. If no, do not complete rest of form.
   b. If yes, check tanks.

3. Is there evidence that wastes placed in the tank are incompatible with the tank or liner? (IAW 265.192) ____YES ✓NO

   NOTE: Any evidence of ruptures, leaks or corrosion. (Use narrative explanations sheet.)

4. Are there any uncovered tanks? (IAW 265.192) ____YES ✓NO

   a. If no, do not complete 4b. -e.
   b. If yes, do they have 2 feet (60cm) freeboard? NA YES ____NO

   OR

   c. A containment structure? (e.g. dike or trench) ____YES ____NO

   OR

   d. A drainage control system? ____YES ____NO

   OR

   e. A diversion structure? (e.g. standby tank) ✓YES ____NO
   (NOTE: The structure in c, d or e must have a capacity that equals or exceeds the colume of the to 2 feet (60 cm) of the tank.

If the answers to 4b. -e. are "no", explain current conditions using narrative sheets.

Area of
N/C

5. Are any of the tanks continous feed? (IAW 265.192) ____YES ✓NO

____ a. If yes, is it equipped with a means to stop inflow (e.g. waste feed cutoff or by-pass to a stand-by tank)? NA YES ____NO

Waste Analysis

6. Is the tank used to store one waste exclusively? ____YES ✓NO
(Use narrative explanations sheet). Variety of acid wastes HCl, HF, H_2SO_4, Chromic

____ 1. Are waste analyses and trail tests conducted on these wastes ____YES ✓NO

OR

Does the owner/operator have written documented information on similar treatment of similar wastes under similar operating conditions? & Experience ____YES ✓NO

____ 2. Is this information retained in the operating record? ____YES ✓NO

Inspections (Note: This section does not exclude underground tanks)

____ 7. Does the owner/operator inspect the following at least daily, where present? (IAW 265.194) NA YES ____NO

(Indicate which items are present in 7 and 8.)

____ a. Discharge control equipment (e.g. waste feed cut-off, by pass and/or drainage systems)? NA YES ____NO

____ b. Monitoring equipment (e.g. pressure and temperature gages)? NA YES ____NO

____ c. Level of waste in each uncovered tank? NA YES ____NO

____ 8. Does the owner/operator inspect the following at least weekly? (IAW 265.194) Not on any Log or Schedule ____YES ✓NO

a. Construction materials of tanks for corrosion or leaks? ✓YES ____NO
b. Construction materials of and area surrounding discharge confinement structures for erosion or signs of leakage? ✓YES ____NO

9. What is the procedure for assessing the condition of the tank(s)? Explain in narrative. (e.g. How does the procedure allow for detection of cracks, leaks or corrosion or procedures for emptying the tank to allow entrance, etc.) Observe for Rust, Leaks, Seepage
Visual Observations by Maintenance Dept

10. Does the facility have a closure plan? (IAW 265.197) ✓ YES ___ NO

___ a. Does the plan address the closure of each tank? If no, explain in narrative. ___ YES ✓ NO

___ b. Is the plan maintained at the facility ✓ YES ___ NO

11. Are ignitable or reactive wastes placed in tanks? (IAW 265.198) ___ YES ✓ NO

___ a. If yes, are they treated, rendered or mixed before or immediately after placement in the tank so it no longer meets the definition of ignitable or reactive? NA YES ___ NO

OR

___ b. Is the waste protected from sources of ignition or reaction? ✓ YES ___ NO

1. If yes, use narrative explanations sheet to describe separation and confinement procedures. by isolation & Segregation

2. If no, use narrative explanations sheet to describe sources of ignition or reaction

OR

c. Is the tank used solely for emergencies? ___ YES ✓ NO

___ 12. Has the facility ever placed incompatible wastes in the tank? (IAW 265.199) ___ YES ✓ NO

a. If yes, what were the results. (Use narrative explanations sheet). (Look for signs of mixing of incompatible wastes, e.g. fire, toxic mist, heat generation, bulging containers, etc.

___ 13. If a waste is to be placed in a tank that previously held an imcompatible waste, was that tank washed? (IAW 265.199) NA YES ___ NO

a. If Yes, describe washing procedures (Use narrative explanation sheet).

b. Describe how it is possible for incompatible wastes to be placed in the same tank. (Use narrative explanations sheet.)

Gulfstream 7/11/86

Tanks
Checklist Narrative

Item

x 6.0 Gulfstream utilizes one storage tank for mixed acid waste. The tank holds approximately 5,000 gallons. Wastes stored in this tank include HCl, HF, H_2SO_4 and Chromic acid. The wastes are said to be hauled offsite to U.S.P.C.I. every 60-70 days however the start of accumulation date is not recorded.

6.1 Based on experience the operator has determined the wastes in the tank to be compatible. Testing is not necessary.

x 8.0 The operator stated that the tanks are inspected however no frequency is determined as inspection schedules and logs are not being maintained for the tank.

9.0 The maintenance department personnel are responsible for visually observing the tank for signs of rust, leaks, seepage etc. The tank appears to be in good condition.

x 10.a The facilities closure plan dated September 1982 does not address the closure of the tank.

11.b The tank is protected from sources of ignition or reaction by its placement on the property, isolated from such sources.

This Checklist is filled out because the Generator was in violation of the 90 day Storage limitation.

FACILITY Gulfstream

DATE: 7-11-86

OKLAHOMA CONTROLLED INDUSTRIAL WASTE COMPLIANCE

INSPECTION REPORT - FACILITIES CHECKLIST

Area of N/C — Section A - General Facility Standards

____ 1. Does facility have EPA Identification No. and OSDH Site No? (Rule 7.1.6 IAW 40 CFR, 265.11) ____YES ✓ NO

____ A. If yes, OSDH Site No._____

____ EPA I.D. NO. OKT4100108821

If no, explain This facility notified as Generator Only - therefore was not given a site number.

____ 2. Has facility received hazardous waste from a foreign source? (Rule 7.1.6.IAW 40 CFR 265.12) ____YES ✓ NO

A. If yes, has he filed a notice with the Director? N/A YES ____NO

____ 3. Does owner/operator control precipation, run on and runoff that is or may become contaminated with industrial waste? (Rule 7.2.2) ✓ YES ____NO

____ A. Explain Berm around Storage tank, Containers stored inside building.

____ B. Is a containment structure used? Designed for less than 90 Day Storage. N/A YES ____NO

1. Is the structure capable of retaining precipitation and runoff generated by 24 hr.,hundred year storm plus a minimum of two (2) feet of freeboard. (Rule 7.2.2.2) N/A YES ____NO

____ 4. Is all material handling conducted with in dikes, retention walls or other features to control all spills? Explain. (Rule 7.2.3) N/A YES ____NO

A. Will the system contain the larger of

i. Volume of largest truck or rail cars loaded or unloaded

or

ii. 20% maximum total volume of all trucks and rail cars being loaded or unloaded at one time
plus
Precipitation and runoff generated by the 24Hr/50 year storm
plus
a minimum 12 in. of freeboard

7/11/86

Area of N/C

___ 5. Are all contained liquids handled as a controlled industrial waste? (Rule 7.2.3.1) ✓ YES ___ NO
Explain Should a tank container etc leak it is handled as C.I.W.

Waste Analysis

✓ 6. Does facility maintain a copy of the waste analysis plan at the facility (Rule 7.1.6, IAW 40 CFR 265.13) ___ YES ✓ NO

___ A. If yes, does it include NA

___ 1. Parameters for which each waste will be analyzed? ___ YES ___ NO

___ 2. Test methods used to test for these parameters? ___ YES ___ NO

___ 3. Sampling method used to obtain sample? ___ YES ___ NO

___ 4. Frequency with which the initial analyses will be reviewed or repeated? (For facilities receiving waste from off-site) ___ YES ___ NO

___ 5. Waste analyses that generators have agreed to supply? (For facilities receiving waste from off-site) ___ YES ___ NO

___ 6. Procedures which are used to inspect and analyze each movement of hazardous waste including:

a. Procedures to be used to determine the identity of each movement of waste? ___ YES ___ NO

b. Sampling method to be used to obtain representative sample of the waste to be identified? ✓ YES ___ NO

7. Does the facility provide adequate security through: (Rule 7.3.1)

___ A. Fence around facility? (Rule 7.3.1) ✓ YES ___ NO

___ B. Locked entrance? (Rule 7.3.1) ✓ YES ___ NO

✓ C. Warning sign? (Rule 7.4.1) ___ YES ✓ NO

General Inspection Requirements

✓ (8.) A. Does the owner/operator maintain a written schedule for inspecting: (Rule 7.1.6 IAW 265.15 - General Inspection Requirements)

___ 1. Monitoring equipment? (If applicable) ~~NA~~ ___ YES ___ NO

Area of N/C

____	2. Safety and emergency equipment?	____YES	✓NO
____	3. Security devices?	____YES	✓NO
____	4. Operating and structural equipment (if applicable)	N/A YES	____NO
____	5. Does the schedule or plan identify the types of problems to be looked for during inspection?	____YES	✓NO
____	a. Malfunction or deterioration (e.g. inoperative sump pump, leaking fitting, eroding dike, corroded piper or tanks, etc.)	____YES	✓NO
____	b. Operator error	____YES	✓NO
____	c. Discharges (e.g. leaks from valves or pipes joint breaks, etc.)	____YES	✓NO
____	B. Is a written schedule for these inspections maintained at the facility?	____YES	✓NO
____	1. Are these inspections conducted?	____YES	✓NO
	a. Is a record of these inspections maintained in the inspection log?	____YES	✓NO
✓	(9) Does the owner/operator have an inspection log? (Rule 7.1.6 IAW 265.15 - General Inspection Requirements)	____YES	✓NO
____	A. If yes, does it include:		
____	1. Date and time of inspection?	N/A YES	____NO
____	2. Name of inspector?	____YES	____NO
____	3. Notation of observations?	____YES	____NO
____	4. Date and nature of repairs or remedial action?	____YES	____NO
____	B. Are there any malfunctions or other deficiencies noted in the inspection log that remain uncorrected? (Use narrative explanation sheet).	____YES	____NO
____	C. Are records of the inspection log maintained at the facility for three (3) years?	____YES	____NO

Personnel Training — not generators Only Checklist

✓	(10) Does the owner/operator maintain Personnel Training Records at the facility? (Rule 7.1.6 IAW 40 CFR 265.16)	____YES	✓NO

How long are they kept? _____

A. If yes, do they include:

Area of N/C

____	1.	Job title and written job description of each position?	N/A ____YES ____NO
____	2.	Description of type and amount of training?	____YES ____NO
____	3.	Records of training given to facility personnel?	____YES ____NO
____	4.	Is training reviewed annually?	____YES ____NO

Requirements for Ignitable, Reactive or Incompatible Waste

11. Does facility handle ignitable or reactive wastes? (Rule 7.1.6 IAW 40 CFR 265.17) ✓ YES ____NO

____ A. If yes, is waste separated and confined from sources of ignition or reaction, (open flames, smoking, cutting and welding, hot surfaces, frictional heat) sparks (static, electrical or mechanical), spontaneous ignition (e.g. from heat producing chemical reactions) and radiant heat? ✓ YES ____NO

1. If yes, ~~use narrative explanations sheet to~~ describe separation and confinement procedures. No Smoking Area + Segregated from ignition sources
2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

____ B. Are smoking and open flame confined to specifically designated locations? ✓ YES ____NO

____ C. Are "No Smoking" signs posted in hazardous areas? ✓ YES ____NO

____ 12 Check Containers (Rule 7.3 & 7.1.6, IAW 40 CFR 265.17)

____ A. Are containers leaking or corroding? ____YES ✓ NO

____ B. Is there evidence of heat generation from incompatible wastes? ____YES ✓ NO

Section B - Preparedness and Prevention

✓ 1. Is there evidence of fire, explosion or contamination of the environment? (Rule 7.1.6 IAW 40 CFR 265.31) ✓ YES ____NO

If yes, use narrative explanations sheet to explain. See Generator Only Narrative Section B.1

2. Is the facility equipped with: (Rule 7.1.6 IAW 40 CFR 265.32)

____ A. Internal communication or alarm system? ✓ YES ____NO

____ (1) Is it easily accessible in case of emergency? ✓ YES ____NO

Area of N/C

___ B. Telephone or two-way radio to call emergency response personnel? ✓ YES ___ NO

___ C. Portable fire extinguishers, fire control equipment, spill control equipment and decontamination equipment? ✓ YES ___ NO

___ (1) Is this equipment tested to assure its proper operation? ✓ YES ___ NO

___ D. Water of adequate volume for hoses, sprinklers or water spray system? ✓ YES ___ NO

(1) Describe source of water City Supply

___ 3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? (Rule 7.1.6, IAW 40 CFR 265.35) ✓ YES ___ NO

✓ 4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes). (Rule 7.1.6 IAW 40 CFR 265.37) Need to provide Contingency Plan has made verbal contact only ___ YES ✓ NO

___ 5. In the case that more than one police and fire department might respond, is there a designated primary authority? (Rule 7.1.6, IAW 40 CFR 265.37) ✓ YES ___ NO

a. If yes, list primary authority Fire = Valley Post Airport
Police = City of Bethany

___ 6. Does the owner/operator have phone numbers of, and agreements with, State emergency response teams, emergency response contractors and equipment suppliers? (Rule 7.1.6, IAW 40 CFR 26.537) ✓ YES ___ NO

___ Are they readily available to emergency coordinator? ✓ YES ___ NO

___ 7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? (Rule 7.1.6, IAW 40 CFR 26.537) ✓ YES ___ NO

Section C - Contingency Plan and Emergency Procedures
(See generator Only Narrative Section C)

___ 1. Is a contingency plan maintained at the facility? (Rule 7.1.6, IAW 40 CFR 265.51 & 53) ✓ YES ___ NO

___ A. 1. If yes, is it a revised SPCC Plan? (Rule 7.1.6, IAW 40 CFR 265.52) ___ YES ✓ NO

Area of N/C

____	2. Actions to be taken in response to emergencies?	✓ YES	____ NO
____	3. Description of arrangements with police, fire and hospital officials?	✓ YES	____ NO
✓	4. List of names, addresses, phone numbers of persons qualified to act as emergency coordinator?	____ YES	✓ NO
✓	5. List of all emergency equipment at the facility?	____ YES	✓ NO
✓	6. Evacuation plan for facility personnel?	____ YES	✓ NO
____ 2.	Is there a emergency coordinator on site, or within short driving distance, at all times? (Rule 7.1.6, IAW 40 CFR 265.55)	✓ YES	____ NO

Section D - Manifest System, Recordkeeping and Reporting

1.	Does facility receive waste from off-site? (Rule 1.3.1.6)	____ YES	✓ NO
____	A. If yes, does the owner/operator retain copies of all manifests?	NA ____ YES	____ NO
	(1) Are the manifests signed and dated and returned to generator?	____ YES	____ NO
	(2) Is a signed copy given to the transporter?	✓ YES	____ NO
✓ 2.	Does the owner/operator keep a written operating record at the facility? (Rule 7.1.6 IAW 265.73)	____ YES	✓ NO
____	A. If yes, does it include:		
____	(1) Description and quantity of each hazardous waste received?	NA ____ YES	____ NO
____	(2) Location and quantity of each hazardous waste at each location?	____ YES	____ NO
____	(3) Records and results of waste analyses?	____ YES	____ NO
____	(4) Report of incidents involving implementing of the contingency plan?	____ YES	____ NO
____	(5) Records and results of required inspections?	____ YES	____ NO
____	(6) Monitoring, testing or analytical date?	✓ YES	____ NO

Area of N/C

(7) Closure cost estimates and for disposal facilities post closure cost estimates? NA ____YES ____NO

(8) Is location of waste recorded on map or diagram? ____YES ____NO

3. Has the facility received any waste (that does not come under the small generator exclusion) not accompanied by a manifest? NA ____YES ____NO

A. If yes, has he submitted an unmanifested waste report to the Director (Rule 7.1.6, IAW 265.76) ____YES ____NO

4. Has the facility received any shipments of controlled industrial waste which were inconsistent with the manifest? (Rule 7.1.6 IAW, 265.72) ____YES ____NO

A. If yes, has he resolved the discrepancy with generator & transporter? ____YES ____NO

B. If no, has a manifest discrepancy report been filed with the Director? ____YES ____NO

Section E. - Plans and Reports

1. Have all plans and reports been visually inspected and/or been made available for inspection? (Rule 7.1.6 IAW 265.74- availability, retention and disposition of records) ✓ YES ____NO

A. Does the facility submit monthly reports to the Director? ____YES ✓ NO
List discrepancies or errors As Generator Submits Quarterly reports

B. Does the facility submit annual reports that include closure cost estimates and, where applicable, monitoring data. ____YES ✓ NO
List discrepancies or errors Closure cost est. not revised annually.

List plans and/or reports not made available for inspection.

Personnel Training Records

2. Did operator provide inspector with a drawing of the facility? ✓ YES ____NO

a. If yes, please indicate which are hazardous waste facilities on the drawing. Attachment

3. Indicate types of hazardous waste facilities.

✓ Containers
✓ Tanks
____Surface Impoundments

Area of
N/C

____Waste Piles
____Land Treatment
____Landfill
____Incinerator
____Thermal Treatment
____Chemical, Physical and Biological Treatment

____ Section F - Groundwater Monitoring

____ 1. Are there any ground water monitoring wells? ____YES ✓ NO
(Rule 7.1.6 , 265.90 Applicability)

NA

a. Is owner/operator aware that prior to 11/19/81 he must install, operate and maintain a groundwater monitoring system (unless waived in writing)? ____YES ____NO

The owner or operator of a surface impoundment, landfill, or land treatment facility which is used to management hazardous waste must implement a groundwater monitoring program. (Rule 7.1.6, IAW 265.90)

____ 1. Specify the site(s) for which a ground water monitoring system (has) or (should have) been installed: _____

_____

____ 2. What date was the monitoring program initiated (date of first sampling)? _____

_____

____ 3. Indicate by a map or sketch locations of each monitoring well and distance from active site(s) (attach). Also list depths diameter and completion data on each well (or include well drilling and completion report). Indicate whether the wells are hydraulically upgradient or downgradient and the direction of flow of the groundwater. (Rule 7.1.6 IAW 265.91)

____ 4. If no ground water monitoring system has been installed, include a copy of Low Potential Ground Water Demonstration used to document a low potential for migration of hazardous waste or constituents. Also describe briefly what basis was used to justify the waiver of monitoring requirements: (Rule 7.1.6 IAW 265.190 (c))

_____

_____

_____

____ 5. If a ground water monitoring system has been installed, attach a copy of the ground water sampling and analysis plan. Briefly describe sample collection technique for obtaining samples and the method used to establish elevation of ground water for ground water monitoring wells: (Rule 7.1.6 IAW 265.92)

_____

_____

Gulfstream 7/11/86

Facilities
Checklist Narrative

Item

This Checklist was filled out because the 90 day storage time limitation was exceeded by the generator. The facility was not listed as a TSD and only notified as a generator.

A 6.0 The facility does not utilize a waste analysis plan. This is required for TSD facilities.

A 7, C The Warning Signs for TSD facilities are non-existent

A 8.0 The facility does not maintain an inspection schedule and does not perform routine inspections

A 9.0 NO inspection logs are utilized or records kept.

A 10.0 There are no personnel training records

B 4.0/C See generator only narrative the contingency plan is incomplete and copies have not been revised and provided to local authorities

D 2.0 As required for TSD facilities Gulfstream does not keep a written operating record at the facility.

G. 2. A There is a closure plan but it does not address the tank at all or decontamination steps. Page 3 of the closure plan states that the Southern storage area may have waste stored in excess of 90 days this should be recorded to not in excess of 90 days. The Closure Plan and and Contingency plan were written for Gulfstream

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Gulfstream 7/11/86

Facilities Checklist Narrative Cont.

by Stanley/Wynne Engineering in 1982. Both plans are inadequate and have been ignored by facility personnel in that their existence was not known to key personnel and filed away rather than actively updated and followed.

H. Gulfstream has not met the financial requirements of a TSD. There is a closure cost estimate but it does not address tank closure and has not been revised annually.

Area of N/C

NA

____ 6. Is a Ground Water Quality Assessment Plan maintained at the facility?

YES ____ NO ____ Outline only ____

7. Indicate the name and address of the facility conducting the analyses.

____

Section G - Closure and Post Closure (Rule 7.1.6)

1. Attach copy of closure plan. See Bound Copy #2

____ 2. Does owner/operator maintain copy of closure plan at facility? (IAW 265.112) ✓ YES ____ NO

If yes;

✓ (A.) Does Closure Plan Include: Closure plan does not address Tank Storage area only containers

____	1. Description of steps to close facility.	✓ YES	____ NO
____	2. Estimate of maximum inventory of wastes at facility	✓ YES	____ NO
____	3. List steps needed to decontaminate equipment.	____ YES	✓ NO
____	4. Expected year of closure and schedule of closure.	✓ YES	____ NO

____ B. Does Post Closure Plan provide for thirty (30) years. (IAW 265.117) NA

____	1. Monitoring Activities.	____ YES	____ NO
____	2. Maintenance of monitoring and containment systems.	____ YES	____ NO
____	3. Has land authority been notified of waste disposal? (IAW 265.119)	____ YES	____ NO
____	4. Does deed contain notice that property was used for waste disposal? (IAW 265.120)	____ YES	____ NO

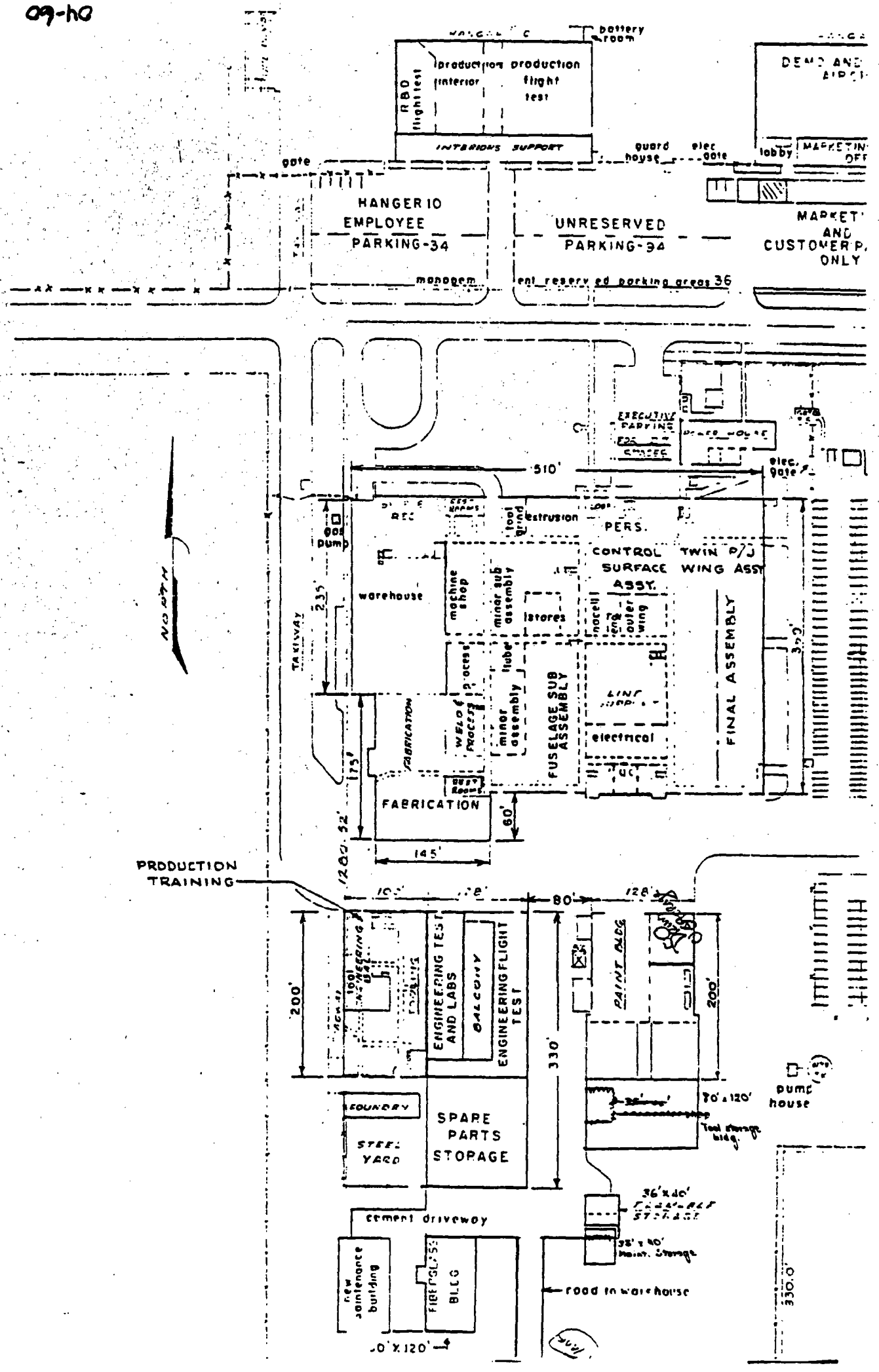
✓ Section H - Financial Requirements (Rule 7.1.9)

NA if Generator only

____	1. List instrument of financial responsibility.		
____	2. Is there a cost estimate for closure? (IAW 265.142)	✓ YES	____ NO
____	3. Is there financial assurance for closure? (IAW 265.143)	____ YES	✓ NO
____	4. Is there a cost estimate for post-closure? (IAW 265.144)	____ YES	✓ NO

04-59

09-h0


battery room
production interior
production flight test
RBO flight test
INTERIORS SUPPORT
guard house
elec gate
lobby
gate
HANGER 10
EMPLOYEE PARKING-34
UNRESERVED PARKING-94
monogram
ent reserved parking areas 36
EXECUTIVE PARKING
510'
elec. gate
gas pump
tool grind
extrusion
PERS.
warehouse
machine shop
minor sub assembly
stores
CONTROL SURFACE ASSY.
TWIN P/J WING ASSY
inner wing
outer wing
FINAL ASSEMBLY
TAXIWAY
235'
process
tube assembly
minor assembly
FUSELAGE SUB ASSEMBLY
electrical
FABRICATION
175'
60'
52'
145'
1200'
PRODUCTION TRAINING
80'
128'
200'
330'
ENGINEERING TEST AND LABS
BALCONY
ENGINEERING FLIGHT TEST
PAINT BLDG
pump house
FOUNDRY
STEEL YARD
SPARE PARTS STORAGE
cement driveway
new maintenance building
FIBERGLASS BLD
road to warehouse
330.0'

Area of N/C

____	3. Is a closure plan maintained at the facility?	✓ YES	____ NO
____	4. Is there evidence of any open burning of hazardous waste? (Use narrative explanations sheet)	✓ YES	____ NO
____	5. Is open burning or detonation of waste explosives conducted? (IAW 265.382)	✓ YES	____ NO
____	a. If yes, is the detonation performed in accordance with the following table?	YES	

Pounds of waste explosives or propellants	Minimum distance from open burning detonation to the property or others
0-100	204m (670 ft)
101-1,000	380m (1,250 ft)
1,001-10,000	530m (1,730 ft)
10,001-30,000	690m (2,260 ft)

Photograph Number 1

Site Name: Air Center Inc.

CERCLIS: OKD980750319

Location: Oklahoma City, OK

TDD Number: F-6-8808-36

Photographer: Ravinder Joseph

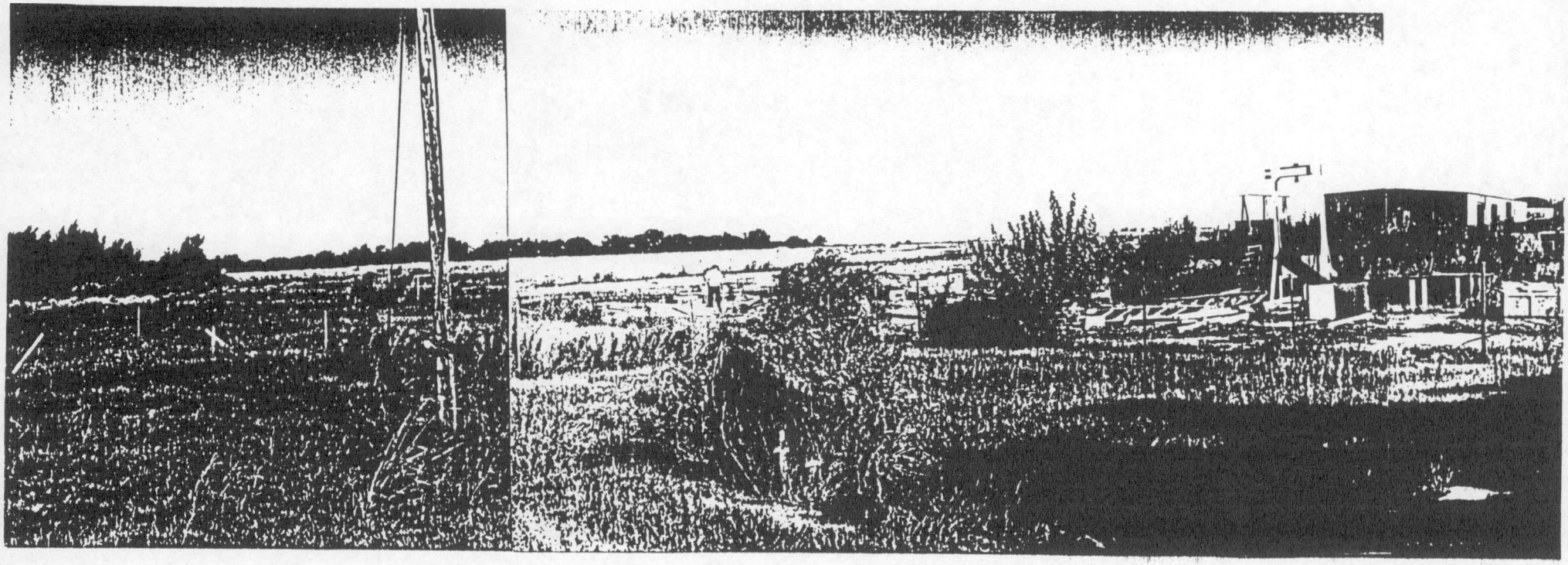
Witness: Tom Rountree

Date: 8-22-88 Time: 0920 hours

Direction: N.W. to S.E.

Comments: Panoramic of Gulfstream Aerospace from off-site. Matches left side of photo # 2.

(This photograph matches negative number 2, 3 and 4)



040

Photograph Number 2

Site Name: Air Center Inc.

CERCLIS: OKD980750319

Location: Oklahoma City, OK

TDD Number: F-6-8808-36

Photographer: Ravinder Joseph

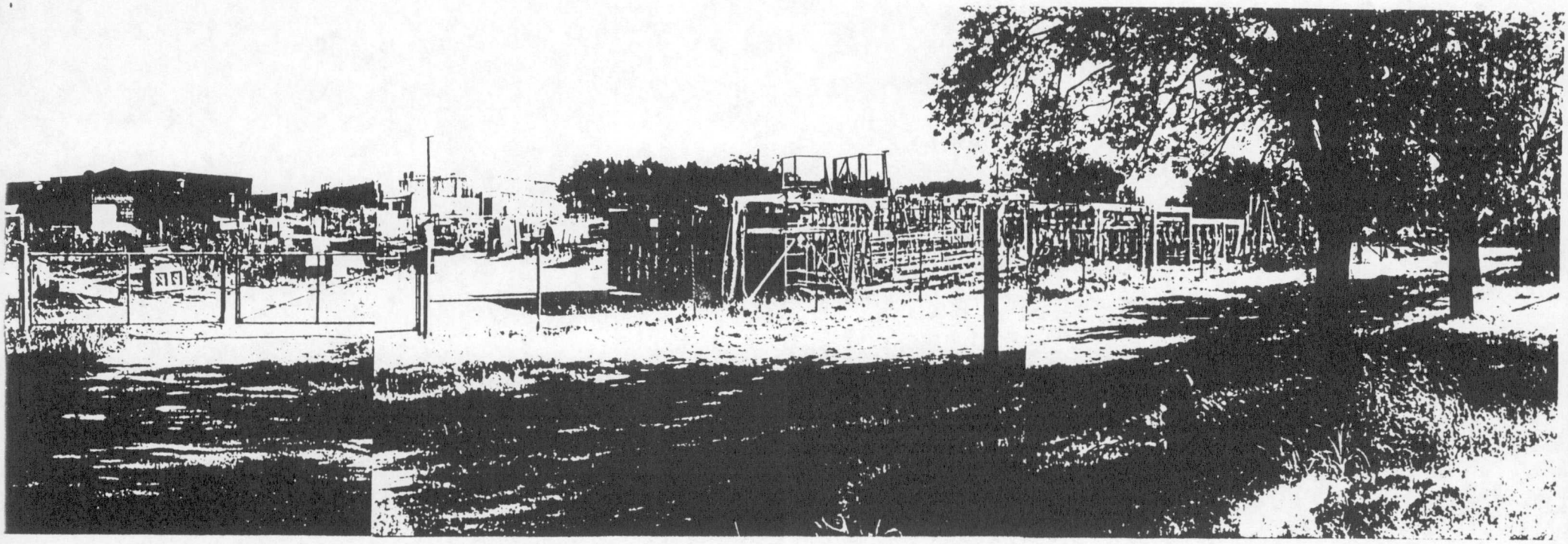
Witness: Tom Rountree

Date: 8-22-88 Time: 0920 hours

Direction: N.W. to S.E.

Comments: Panoramic of Gulfstream Aerospace from off-site. Matches right side of photo # 1.

(This photograph matches negative number 5 and 6)



04-63

Photograph Number 3

Site Name: Air Center Inc. CERCLIS: OKD980750319

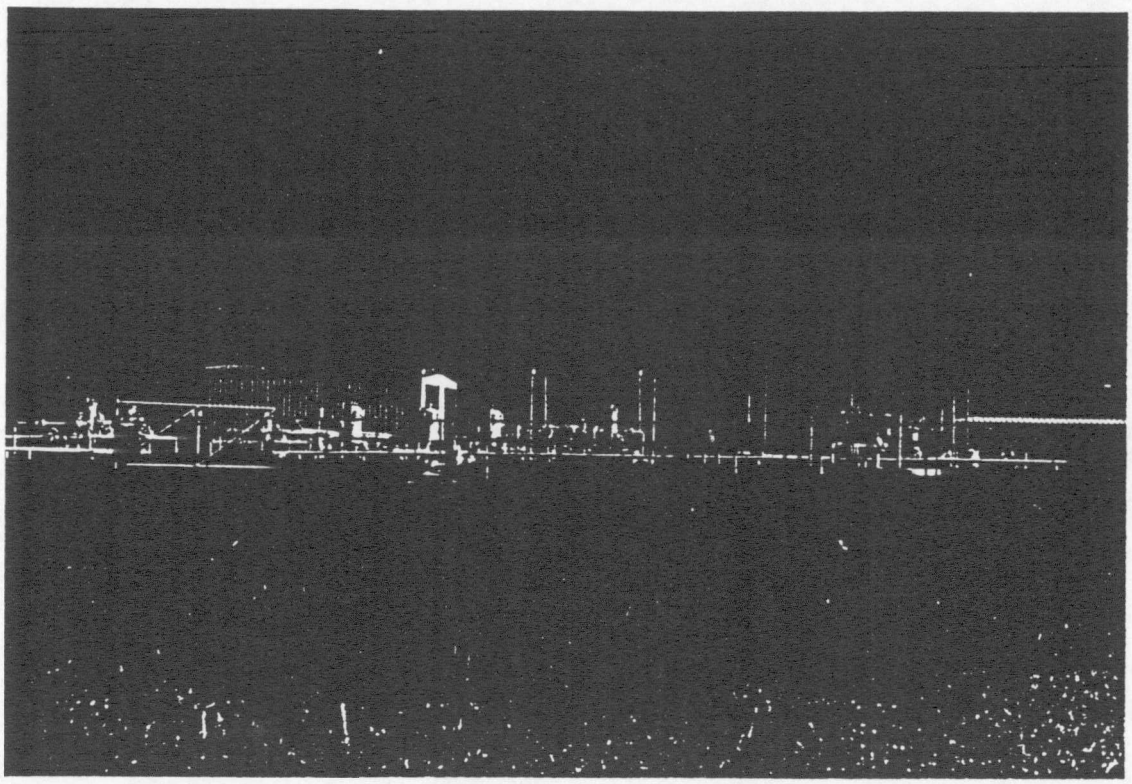
Location: Oklahoma City, OK TDD Number: F-6-8808-36

Photographer: Ravinder Joseph **Witness:** Tom Rountree

Date: 8-22-88 **Time:** 0955 hours **Direction:** N.W.

Comments: Underground tank farm on Wiley Post Airport Property

(This photograph matches negative number 7)



04-6

Photograph Number 4

Site Name: Air Center Inc.

CERCLIS: OKD980750319

Location: Oklahoma City, OK

TDD Number: F-6-8808-36

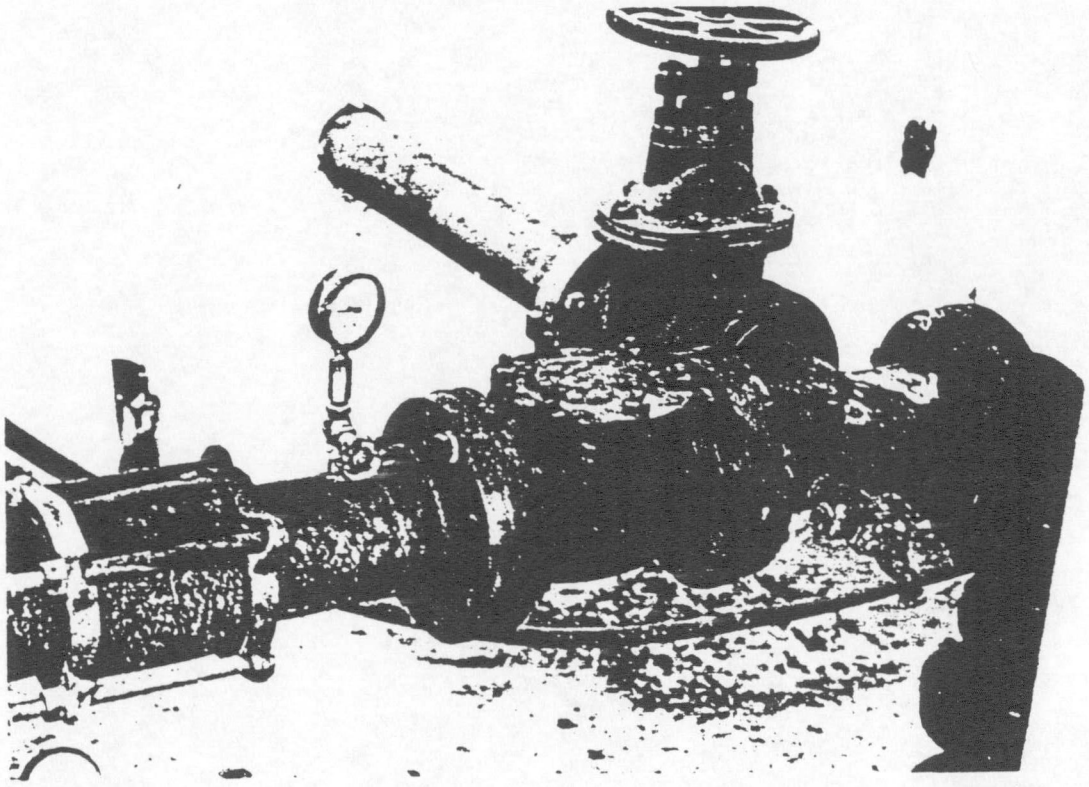
Photographer: Ravinder Joseph

Witness: Tom Rountree

Date: 8-22-88 **Time:** 1245 hours **Direction:** E

Comments: City of Bethany Well # 21

(This photograph matches negative number 8)



Photograph Number 5

Site Name: Air Center Inc.

CERCLIS: OKD980750319

Location: Oklahoma City, OK

TDD Number: F-6-8808-36

Photographer: Ravinder Joseph

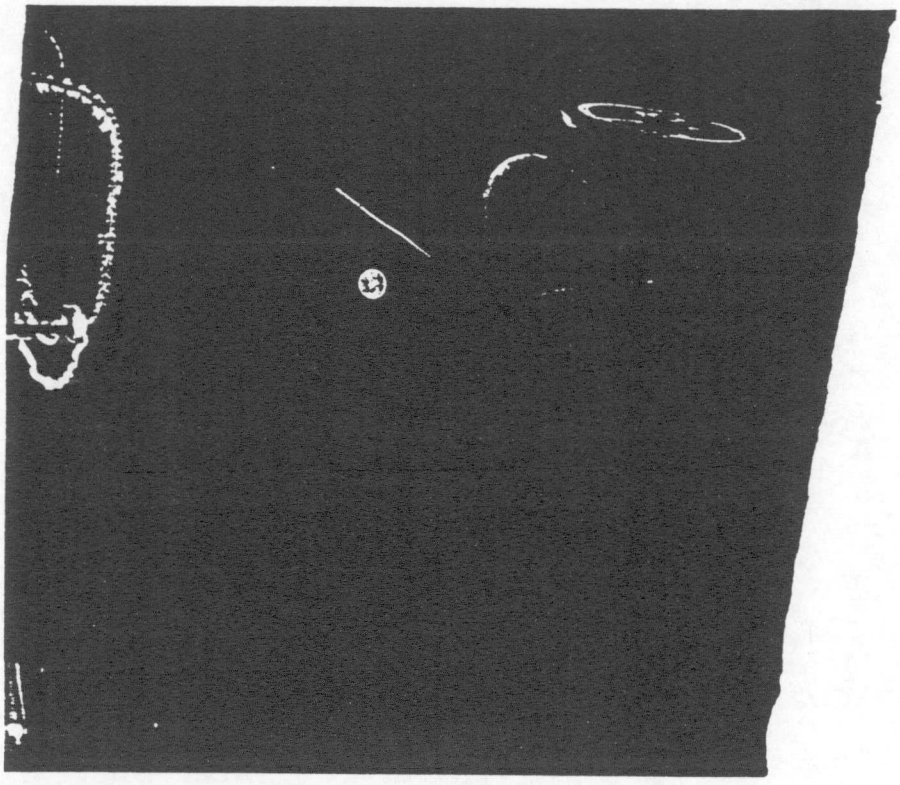
Witness: Tom Rountree

Date: 8-22-88 Time: 1340 hours

Direction: E

Comments: City of Bethany Well # 23

(This photograph matches negative number 9)



Insp. Date July 11, 1986
Disp. Plan No. J 55109
Permit No. _____
EPA I.D. NO. OKT4100 1082

OKLAHOMA CONTROLLED INDUSTRIAL WASTE COMPLIANCE INSPECTION

SITE IDENTIFICATION

Gulfstream Aerospace Corp. 5001 N Rockwell
A. Site Name B. Street (or other identifie

Bethany OK 73008 Oklahoma
C. City D. State E. Zip Code F. County Name

Bill Humes Senior V.P. operator
G. Site Operator Information

1. Name S. Telephone Number
Owner: Chrysler Corp. 405-789-5000
3. Street 4. City 5. State 6. Zip Code

(Same)
H. Site Description

Manufacture Aircraft Parts
J. Type of Ownership
___1. Federal ___2. State ___3. County ___4. Municipal ✓5. Private

K. ✓1. Generator ___2. Transporter ___3. Treatment ___4. Storage ___5. Disposal

INSPECTION INFORMATION

A. Principal Inspector Information

1. Name Lynn Doty RS 2. Title Environmental Specialist

3. Organization OSDH 4. Telephone No. (area code & No.) 405-271-5338

B. Inspection Participants

Joe Reeves, Material + Process Engr. Aerospace Corp
Barbara Mass, Personnel Coordinator Aerospace Corp
Kayla D. Williams Records Clerk/dispatcher "

1/45

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GENERATOR: Gulfstream Aero

DATE: July 11, 1985

OKLAHOMA CONTROLLED INDUSTRIAL WASTE COMPLIANCE INSPECTION REPORT GENERATORS CHECKLIST

Note: On multiple part questions circle those not in compliance.

Section A EPA Identification Number.

Area of N/C

1. Does Generator have EPA ID Number. (Rule 1.2.4 IAW 262.12 - EPA ID Number) and approved Disposal Plan (Rule 3.1)? ✓ Yes ____ No

____ a. If yes, EPA ID Number OKT410010821

____ b. OSDH Disposal Plan Number 55109 ✓ Yes ____ No

Section B - Hazardous Waste Determination - (Rule 3.13 IAW 262.11)

1. Does generator generate hazardous waste(s) listed in Subpart D (Rule 2.1 IAW 261.30 - 261.33 - List of Hazardous Waste)? ✓ Yes ____ No

2. Does generator generate solid waste(s) that exhibit hazardous characteristics: (Corrosivity, ignitability, reactivity, EP toxicity) (Rule 2.3 IAW 261.20 - 261.24 - Characteristics of Hazardous Waste)? ✓ Yes ____ No

   a. If yes, list wastes and quantities on attachment. (Include EPA Hazardous Waste Number and Oklahoma Waste Code and provide waste name and description)

   b. Does generator determine characteristics by testing or by applying knowledge of processes? Both

      (1) If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)? ✓ Yes ____ No
      USPCI did testing for Generator

      (2) If equivalent test methods used, attach copy of equivalent methods used.

3. Are there any other solid wastes deemed non-hazardous by generators? i.e. (process waste streams, collected matter from air pollution control equipment, water treatment sludge, etc.) ____ Yes ✓ No

   a. If yes, did generator determine non-hazardous characteristics by testing or knowledge of process?

   _____ NA

      (1) If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)? ____ Yes ____ No

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Area of N/C

(2) If equivalent test methods are used, attach copy of equivalent methods used.

b. List wastes and quantities deemed non-hazardous or processes from which non-hazardous wastes were produced. (Use narrative explanations sheet).

Section C - Manifest

1. Does generator ship hazardous waste off-site? (Subpart B - The Manifest) ✓ Yes ____ No

a. If no, do not fill out Section C and D.

b. If yes, identify primary off-site facility(s). ~~Use narrative explanations sheet.~~: USPCI Lone Mountain

2. Has generator shipped hazardous waste off-site since November 19, 1980? ✓ Yes ____ No

3. Is generator exempted from regulation because of:

Small quantity generator (Rule 2.2 IAW 261.55 - Special requirements) ____ Yes ✓ No
or
produces non-hazardous waste at this time (Rule 2.1 IAW 261.4 - Exclusions)? ____ Yes ✓ No

4. If not exempted does generator use a manifest? (Act 1-2010) ✓ Yes ____ No

a. If yes, is manifest form approved by OSDH? (Act 1-2010) ✓ Yes ____ No

(Check completed manifests at random. Indicate how many manifests were inspected, how many violations were noted and the type of violation).

5. Does all the following information appear on the manifest(s)? (Rule 4.3.1 IAW 262.20) ✓ Yes ____ No

(Circle deficiencies)

a. Manifest document number
b. Generator's name
c. Generator's EPA ID number
d. Generator's State ID number (disposal plan number)
e. Generator's adddress
f. Generator's telephone number
g. Generator's signature
h. Date that waste was offered for shipment
i. Transporter's name
j. Transporter's EPA ID number
k. Transporter's OK ID number

Gulfstream 7/11/86

Generators

Checklist Narrative

Item

B.1+B2 The types of wastes and quantities are attached to this checklist as photocopies of the biennial report, disposal plan and facility records. In addition to the attached list of wastes the facility has contaminated soil to dispose of. On May 22, 1986 a spill of hydrofluoric and chromic acid was reported and the removed soil was sampled. The attached lab report shows this contaminated soil to be EP Toxic for Chromium. After soil removal the ground was sampled by compositing soil every fifty feet along the spill area. The ground sample data is also attached and shows an EP toxic value for lead. It was discovered during sampling that lead contaminated foundry sand had been previously dumped on the ground. The lead contaminated area was colored a dark brown. The facility must initiate a clean-up program for the lead contaminated area. All lead and chromium contaminated soil must be disposed of as a hazardous waste. A memo to the file was written regarding the spill incident.

04

Gulfstream 7/11/8

Generators
Checklist Narrative Cont

Item

D.6.f
E.6.1 Most of the containers in the storage area did not have the required labels identifying hazardous waste. Those containers which lacked labels also lacked the beginning date of accumulation time.

E.a The facility is in the process of cleaning out old chemical products and as a result has accumulated a large amount of waste. USPCI packed and labelled the extra waste for shipping. The regular waste was not labelled and all of the containers were stored for more than 90 days while cleanup progressed. The philosophy for exceeding the 90 day limit was to save money by shipping all generated waste at one time to cut transport cost. The date on labelled drums was March 6, 1986

Do not make entries in shaded ar — OMB #: 2050-0024 Expires: 5-31-88

ENVIRONMENTAL PROTECTION AGENCY

GENERATOR BIENNIAL HAZARDOUS WASTE REPORT FOR 1985

This report is for the calendar year ending December 31, 1985
Read All Instructions Carefully Before Making Any Entries on Form

I. NON-REGULATED STATUS

Complete this section only if you did not generate regulated quantities of hazardous waste at any time during the 1985 calendar year. Circle the one code at right that best describes your status during the entire year (see instructions for explanation of codes).

mailed 4-8-86

1 Non-handler
2 Small Quantity Generator
4 Exempt
5 Beneficial Use
9 Out of Business

Please print/type with elite type (12 characters per inch)

This Installation's Non-Regulated Status is Expected to Apply:

☐ For 1985 Only ☐ Permanently

☐ Other_____

II. GENERATOR'S EPA I.D. NUMBER

T/A C

F	0	K	T	4	1	0	0	1	0	8	2	1		1
1	2											13	14	15

C303 ENTRY (OFFICIAL USE ONLY): ☐

III. NAME OF ESTABLISHMENT

G	U	L	F	S	T	R	E	A	M		A	E	R	O	S	P	A	C	E		C	O	R	P	O	R	A	T	I	O	N						
30																																						69

IV. ESTABLISHMENT MAILING ADDRESS

3	P	O		B	O	X		2	2	5	0	0																										
15	16																																					45	

Street or P.O. Box

4	O	K	L	A	H	O	M	A		C	I	T	Y		O	K	L	A	H	O	M	A					7	3	1	2	3		
15	16																									41	42	47				51		

City or Town — State — Zip Code

V. LOCATION OF ESTABLISHMENT (if different than section IV above)

5	7	4	0	0		N	W		5	0	t	h		S	T	R	E	E	T																		
15	16																																				45	

Street or Route number

6	O	K	L	A	H	O	M	A		C	I	T	Y		O	K	L	A	H	O	M	A					7	3	1	2	3		
15	16																									41	42	47				51		

City or Town — State — Zip Code

VI. ESTABLISHMENT CONTACT

2	H	U	M	E	S		B	I	L	L																												
15	16																																				45	

Name (last and first)

4	0	5	—	7	8	9	—	5	0	0	0	
46											55	

Phone No. (area code & no.)

VII. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

BILL M HUMES SR. VICE-PRES Bill M Humes 4-3-86

Print/Type Name — Title — Signature — Date Signed

04-3

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Do not make entries in shaded areas

ENVIRONMENTAL PROTECTION AGENCY

Generator Biennial Hazardous Waste Report for 1985 (cont.)

This report is for the calendar year ending December 31, 1985

Date rec'd: _____ Rec'd by: _____

VIII. GENERATOR'S EPA I.D. NO.

T/A C

G	O	K	T	4	1	0	0	1	0	8	2	1		1
1	2											13	14	15

X. FACILITY'S EPA I.D. NO.

F	O	K	D	0	6	5	4	3	8	3	7	6
16												28

XII. TRANSPORTATION SERVICES USED

U.S. Pollution Control, Inc.
OKD981046295

IX. FACILITY NAME (specify facility to which all wastes on this page were shipped)

Lone Mountain

XI. FACILITY ADDRESS

RR 2, Box 180A
Waynoka, OK 73860

XIII. WASTE IDENTIFICATION

Sequence #	Line #	A. Description of Waste	B. DOT Hazard code	C. EPA Hazardous Waste No. (see instructions)	D. Amount of Waste	E. Unit of Measure
	1	Mixed acid waste, corrosive liquid, from pickling of steel from cad plating process	0,2	D,0,0,2	5,5,0,0	8.7 lb./ G
	2	Soil contaminated w/oil	1,5	0,0,0,0	2,2,5,5	12.0 lb./ G
	3	Zyglo penetrant used for finding cracks in metal	1,5	0,0,0,0	1,1,0	6.5 lb./ G
	4	Zinc chromate paint sludge, by-product of paint booths	1,5	0,0,0,0	2,0,9,0	10.0 lb./ G
	5	Dried paint waste, by-product of paint booths (sensitizer)	1,5	0,0,0,0	6,6,0	8.7 lb./ G
	6	Styrene, used to make fiberglass parts	0,8	D,0,0,1	5,5	10.4 lb./ G
	7	Oil & water (mainly water)	1,5	0,0,0,0	1,6,5,0	8.3 lb./ G
	8					
	9					
	10					
	11					
	12					

XIV. COMMENTS (enter information by section number—see instructions)

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0436

Do not make entries in shaded ar

ENVIRONMENTAL PROTECTION A[illegible]CY

Generator Biennial Hazardous Waste Report for 1985 (cont.)

This report is for the calendar year ending December 31, 1985

Date rec'd: _____ Rec'd by: _____

VIII. GENERATOR'S EPA I.D. NO.

G|O|K|T|4|1|0|0|1|0|8|2|1| |T/A C|1|

IX. FACILITY NAME (specify facility to which all wastes on this page were shipped)

Hydrocarbon Recylers, Inc.

X. FACILITY'S EPA I.D. NO.

F|O|K|D|0|0|0|6|3|2|7|3|7|

XI. FACILITY ADDRESS

5354 W. 46th St. South
Tulsa, Okla. 74157

XII. TRANSPORTATION SERVICES USED

U.S. Pollution Control, Inc.
OKD981046295

XIII. WASTE IDENTIFICATION

Sequence #	Line #	A. Description of Waste	B. DOT Hazard code	C. EPA Hazardous Waste No. (see instructions)	D. Amount of Waste	E. Unit of Measure
	1	Methyl Ethyl Ketone	0,8	U159	220	6.7 lb./G
	2	Stoddard solvent, used in degreasing	0,8	D001	110	6.8 lb./G
	3	JP50, jet fuel	0,8	D001	275	6.7 lb./G
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					

Tear out here

XIV. COMMENTS (enter information by section number—see instructions)

04-3

Do not make entries in shaded areas

ENVIRONMENTAL PROTECTION AGENCY

Generator Biennial Hazardous Waste Report for 1985 (cont.)

This report is for the calendar year ending December 31, 1985

Date rec'd: _____ Rec'd by: _____

VIII. GENERATOR'S EPA I.D. NO.

G | O | K | T | 4 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 8 | 2 | 1 | 1 | T/A C | 1

1 2 13 14 15

X. FACILITY'S EPA I.D. NO.

F | O | K | D | 0 | 6 | 5 | 4 | 3 | 8 | 3 | 7 | 6 |

16 28

IX. FACILITY NAME (specify facility to which all wastes on this page were shipped)

Lone Mountain

XI. FACILITY ADDRESS

RR 2, Box 180A
Waynoka, OK 73860

XII. TRANSPORTATION SERVICES USED

U .S. Pollution Control, Inc.
OKD981046295

XIII. WASTE IDENTIFICATION

Sequence #	Line #	A. Description of Waste	B. DOT Hazard code	C. EPA Hazardous Waste No. (see instructions)	D. Amount of Waste	E. Unit of Measure
29 32	1	Mixed acid waste, result of pickling of steel from cad plating and anodizing process	0 2 (33 34)	D 0 0 2 (35 38 / 39 42 / 43 46 / 47 50)	9 0 0 0 (51 59)	8.7 lb./G (60)
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
	11					
	12					

Tear out here

XIV. COMMENTS (enter information by section number—see instructions)

1985 Generated - Stored on-site less than 90 days as of December 31, 1985

04-38

Do not make entries in shaded areas

ENVIRONMENTAL PROTECTION / NCY

Generator Biennial Hazardous Waste Report for 1985 (cont.)

This report is for the calendar year ending December 31, 1985

Date rec'd: _____ Rec'd by: _____

XV. GENERATOR'S EPA I.D. NO.

T/A C

G	0	K	T	4	1	0	0	1	0	8	2	1	T	T
1	2											13	14	15

XVI. WASTE MINIMIZATION (narrative description)

Due to economic conditions, our facility was forced to discontinue the manufacture of aircraft which resulted in less hazardous waste being generated than previous years. This provided us sufficient time to do a detail cleanup and dispose of excessive materials we had accumulated so we could set up a more efficient inventory control. We are presently implementing a complete program to dispose of our chemicals every 90 days. We are also informing the employees of their right to know of what materials they are handling and providing Material Safety Data Sheets upon request. We have made an effort to dispose of hazardous material in 1985 by cleaning up old pits to prevent any contamination.

Tear out here

CONTROLLED INDUSTRIAL WASTE GENERATOR'S LISTING

This is a listing of all Controlled Industrial Wastes reported to the Oklahoma State Department of Health, Industrial Waste Division as being generated and disposed of by the Business/Plant named below, as of the date specified. This is not a permit and does not constitute authorization of any particular disposal practice, method or site.

Disposal Plan Number 55109, amending plan approved September 6, 1985

has been assigned, as of October 21, 1985, to: EPA ID Number 0KT410010821

Business/Plant Name Gulfstream Aerospace Corp. Commander Business Aircraft

Mailing Address 5001 N. Rockwell, Bethany, OK 73008

Plant Address/Location 7400 Northwest 50th, Oklahoma City, OK 73123

Person in Charge of Facility Bill Humes, V.P. Phone No. (405) 789-5000

NO.	STATE WASTE CODE	FEDERAL WASTE CODE	CHARACTERISTIC	DESCRIPTION	USPCI TRANS-PORTER	USPCI RECEIVING FACILITY	REMARKS
1	020111		Corrosive	Acid and sludge	2004	SD47002	
2	020102		Corrosive	Mixed acid wastes	2004	SD47002	
3	020102		Corrosive	Chromic acid	2004	SD47002	
4	654103		Sensitizer	Dried paint waste Contains Zinc Chromate/in Resins + Solvents	2004	SD47002	
5	664116		Toxic	Styrene	2004 @	## SD47002	
6	163802		Toxic One Time	PCB's	2005 #	AL00781+	
7	064600		Toxic	Zyglo Penetrant	2004	SD47002	
8	104110	U159	Flammable	MEK	2004	RR47001*	
9	104611		Flammable	Stoddard Solvent	2004	RR47001*	
10	103000		Flammable One Time	Jet fuel Bottoms of tank being emptied	2004	RR72001	

Facility Contact:

Prepared by: AAC, LJB

\# Alternate hauler is 2004
-C+ Alternate disposal site is AR00249
\## ~~Alternate disposal site is RR83010~~
@ Alternate haulers are 1085 and 3055
* Alternate disposal site RR72001

Have waste oils which are Recycled from hydropress 2x's / yr @ 500-600 gallons each
Taken directly from process units
Clean up this year will be amounting in increases on disposal amts

Mailed 9-25-85

OKLAHOMA STATE DEPARTMENT OF HEALTH
INDUSTRIAL & SOLID WASTE SERVICE

ODH Form No. 859 (6-1-82)

CONTROLLED INDUSTRIAL WASTE GENERATOR'S LISTING

This is a listing of all Controlled Industrial Wastes reported to the Oklahoma State Department of Health, Industrial Waste Division as being generated and disposed of by the Business/Plant named below, as of the date specified. This is not a permit and does not constitute authorization of any particular disposal practice, method or site.

Disposal Plan Number 55109, amending plan approved September 6, 1985

has been assigned, as of October 21, 19 85, to: EPA ID Number OKT410010821

Business/Plant Name Page 2

Mailing Address

Plant Address/Location

Person in Charge of Facility Phone No. ( )

NO.	STATE WASTE CODE	FEDERAL WASTE CODE	CHARACTERISTIC	DESCRIPTION	TRANS-PORTER	RECEIVING FACILITY	REMARKS
11	093302	One Time Tank Cleanout	Unclassified	Waste oil/water	2004	SD47002	
12	793313	One Time Disposal	Unclassified	Oil contaminated soil	2004	SD47002	

Facility Contact:

Prepared by: AAC, LJB

Description:

Industrial Waste Disposal Report for 1980 & 1981 & 1982

Yr. Ending 1980

Date	Quantity	Dept. No.	Vendor	P.O. No.	Price	Remarks
1-31-80	None	020	None	None	ø	ø
2-30-80	6,000 gal.	020	U.S. Pollution Control	21BC239635	* 2,178.06	Selcon 29 Corrosive Solution
3-30-80	None	020	None	None	ø	ø
4-31-80	None	020	None	None	ø	ø
				1981		
Yr. Ending						
1-31-81	None	020	Did not send report - waiting for			new disposal plan num
2-30-81	None	020	Did not send report - waiting for new			disposal plan number
3-30-81	11 400 gal.	020	U.S.D.C.	21BC202329	* 1,628.64	caustic - Waste acids & sludge
	5,000 gal.	"	"	21BC202452	* 1949.62	caustic chromic acid solution
	5 000 gal.	"	U.S.P.C.	21BC202500	* 1821.41	chromic acid solution
4-31-81	32 drums	020	U.S.P.C.	21BC202693	* 2,432.00	caustic chromic-acid solution
				1982		
Yr. Ending						
1-31-82	None	020	None	None	ø	ø Most copy
2-30-82	13 drums	020	U.S.P.C.	21BC207390	* 1,425.00	Chromic Acid solution
	3,000 ~~200~~ gal.	"	U.S.P.C.	207471	* 4,331.00	Chromic Acid solution
	5,100 gal.	"	U.S.P.C.	"		Dried paint Waste
3-30-82	15 drums	020	U.S.P.C.	207657	* 1,871.00	Polyester Styrene
	2 drums	"	"	"		zinc chromate sludge
4-31-82	~~None~~	~~020~~	~~None~~	~~None~~	~~ø~~	~~ø~~
	1 drum	020	U.S.P.C.	208042	* 1,506.00	Chemical cleaner
	4 drums	"	"	"		Paint waste
	1 drum	"	"	"		Dark

Description:

Industrial Waste Disposal Report for 1983

Ft. Findlay

1983

Date	Quantity	Dept. No.	Vendor	P.O. No.	Price	Remarks
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		Chemical [illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
-31-83	〃	020	〃	〃		〃
30-83	5,000 gal.	020	U.S.P.C.	213529	2,148.45	Dioxidizer
30-83	2 gal.	020	U.S.P.C.	213815	1,097.00	PCB + transformer oil
	45000 gal	020	〃	213788	4,169.86	Mixed acid wastes
-31-83	1,155 gal.	020	Diaz Refining	214214	1,050.00	Zinc Chromate
	385 gal.	020	〃	〃	350.00	Resin & Solvent
				1984		
-31-84	5,100 gal.	020	U.S.P.C.	214637	1,887.46	Acid & sludge corrosive
-30-84	〃	020	〃	〃	〃	〃
-30-84	〃	020	〃	〃	〃	〃
-31-84	〃	020	〃	〃	〃	〃

Description:

Qtr. Ending 1985 04-27

Date	Quantity	Dept. No.	Vendor	P.O. No.	Price	Remarks
-31-85	None	020	—	—	—	—
-31-85	(4-24) 5500 gal.	020	U.S.P.C.	217293	$2852.29	Mixed acid wastes
-30-85	None	020	—	—	—	—
31-85	(11-11-85) 2255 gal.	020	U.S.P.C. (to Lone Mountain)	216673	$5,796.90 (total)	Soil contaminated w/oil
	(11-11-85) 110 gal.	"	"	"		Zyglo penetrant
	(11-11-85) 1310 gal.	"	"	"		Zinc chromate paint s/u
	(11-11-85) 110 gal.	"	"	"		Chromic acid, neutralized
	(11-11-85) 55 gal.	"	"	"		Styrene
	(12-11-85) 220 gal.	"	U.S.P.C. (to hydrocarbon Recyclers)	216709	$5,620.65	MEK
	(12-11-85) 110 gal.	"	"	"		Stoddard Solvent
	(12-11-85) 275 gal.	"	"	"		Jet fuel (JP5O)
	(12-11-85) 1,650 gal.	"	" (to Lone Mountain)	"		Oily water
	(12-11-85) 880 gal.	"	"	"		Zinc Chromate paint s/u
660	(12-11-85) 330 gal.	"	"	"		Dried paint waste
Total	Gal. for Year 1985		13,030 lbs.		All	same ORM Waste Code N

Description:

Qtr Ending 1986 04-28

Date	Quantity	Dept. No.	Vendor	P.O. No.	Price	Remarks
3-1-86	(1-6-86) 5000 gal.	020	U.S.P.C.	216726	$2,670.11	Mixed acid wastes
	(1-16-86) 4000 gal.	020	U.S.P.C.	216741	$2,169.71	Mixed acid wastes
30-JG		(Did not report on quarterly report - not considered haz. waste)				
part?	(4-11-86) 2400 gal.	020	Hydrocarbon Recyclers	318887	$ 960.00	100 octane aviation fuel
30-JG						

SAMPLE NUMBER 133407 00000
DATE COLLECTED 05/27/86
DATE RECEIVED 05/28/86
DATE COMPLETED 06/18/86
STATION
COLLECTED BY LYNN DOTY

OKLAHOMA STATE DEPARTMENT OF HEALTH
STATE WATER QUALITY LABORATORY
WATER ANALYSIS REPORT

RECEIVED
JUN 20 1986

Soil removed and placed in Storage bins

DWAIN FARLEY, CHIEF
WASTE MANAGEMENT SERVICE
OSDH ROOM 803
OKLAHOMA CITY OK 73152

COPY

GENERAL PROJECTS

	CONCENTRATION IN SAMPLE				
LUORIDE IN SEDIMENT		28.80	MG/KG	PH (LAB)	11.60 STD U
RSENIC IN SEDIMENT	<	3.00	MG/KG	BARIUM IN SEDIMENT	52.00 MG/KG
ADMIUM IN SEDIMENT		9.71	MG/KG	EP TOX CHROMIUM	26900 UG/L
HROMIUM IN SEDIMENT		1281.00	MG/KG	LEAD IN SEDIMENT	156.00 MG/KG
P TOX LEAD	<	45	UG/L	MERCURY IN SEDIMENT	< 0.05 MG/KG
ELENIUM IN SEDIMENT		4.63	MG/KG	SILVER IN SEDIMENT	< 0.35 MG/KG

REMARK CODE EXPLANATIONS

< LESS THAN DETECTION LIMIT

SEE REVERSE SIDE FOR WATER QUALITY REPORT SIGNIFICANCE

SOURCE GULFSTREAM AEROSPACE SURFACE CITY OKLAHOMA CITY
PROGRAM WASTE MGMT SER(GENERAL PROJ)
COUNTY OKLAHOMA

LEGAL

¼ ¼ ¼ SEC T R M

SAMPLERS COMMENTS CHROMIC AND HYDROFLUORIC ACIDS WERE SPILLED ON GROUND AND NEUTRALIZED WITH SLATE LIME

ANALYSTS COMMENTS No free liquid

SAMPLE NUMBER I 33406 00000

DATE COLLECTED 05/27/86
DATE RECEIVED 05/28/86
DATE COMPLETED 06/13/86
STATION
COLLECTED BY LYNNE DOTY

OKLAHOMA STATE DEPARTMENT OF HEALTH
STATE WATER QUALITY LABORATORY
WATER ANALYSIS REPORT

RECEIVED
JUN 2 [illegible] 1986
Waste Management Service

Soil Remaining on Ground after Clean-up operations

COPY

OWAIN FARLEY, CHIEF
WASTE MANAGEMENT SERVICE
OSDH ROOM 803
OKLAHOMA CITY OK 73152

GENERAL PROJECTS

	CONCENTRATION IN SAMPLE				
LUORIDE IN SEDIMENT	110.00	MG/KG	PH (LAB)		11.10 STD U
RSENIC IN SEDIMENT	11.87	MG/KG	BARIUM IN SEDIMENT		47.75 MG/KG
ADMIUM IN SEDIMENT	9.05	MG/KG	EP TOX CHROMIUM		911 UG/L
HROMIUM IN SEDIMENT	641.60	MG/KG	LEAD IN SEDIMENT		4850.00 MG/KG
P TOX LEAD	11970	UG/L	MERCURY IN SEDIMENT	<	0.05 MG/KG
ELENIUM IN SEDIMENT	5.50	MG/KG	SILVER IN SEDIMENT	<	0.35 MG/KG

REMARK CODE EXPLANATIONS

< LESS THAN DETECTION LIMIT

SEE REVERSE SIDE FOR WATER QUALITY REPORT SIGNIFICANCE

SOURCE GULFSTREAM AEROSPACE SURFACE CITY OKLAHOMA CITY
PROGRAM WASTE MGMT SER(GENERAL PROJ)
COUNTY OKLAHOMA

LEGAL

¼ ¼ ¼ SEC T R M

SAMPLER'S COMMENTS CHROMIC AND HYDROFLUORIC ACIDS WERE SPILLED ON GROUND AND NEUTRALIZED WITH SLATE LIME. SAMPLE I

ANALYST'S COMMENTS No free liquid

1509 Main Street, Suite 900
Dallas, Texas
75201-4809

214/744-1641

ICF TECHNOLOGY INCORPORATED

TO: David Wineman, Region VI RPO

THRU: K. H. Malone Jr., FITOM

THRU: Tim Hall, AFITOM

FROM: Ravinder Joseph, FIT Environmental Engineer

DATE: May 20, 1988

SUBJECT: Sampling Inspection At Air Center, Oklahoma City, OK (OKD 980750319)
TDD # F-6-8711-04
PAN NO: F0K0270SBF

During the week of January 4, 1988, a six member FIT team (Ravinder Joseph, John Jones, Keith Wheeler, Jeff Robinson, Steve Cowan, and Heather Schijf) conducted soil/sediment, subsurface soil and surface water sampling at Air Center, OK. The site is located at 7300 NW (Northwest) 63rd, Wiley Post Airport in Oklahoma City. The site was formerly used as an aircraft stripping and painting facility. Waste generated from the stripping process was allowed to drain into an unlined lagoon where it then entered a drainage ditch and eventually flowed into a residential pond enclosed by the Woodlake residential district. The lagoon was later filled. FIT discovered the presence of two underground storage tanks on-site during a site recon on July 23, 1987. These tanks were used to hold stripped paint sludge. When full, the tanks were pumped dry into a tanker truck and transported to a disposer in Kansas City. The tanks were dry at closure and later pumped dry again by Wiley Post authorities at an undetermined date. Sampling at Air Center was conducted to detect the presence (if any) of heavy metals such as chromium & lead, and organics such as methylene chloride and phenols.

One background surface soil sample at one foot and another background subsurface soil sample at six feet were collected on-site. One off-site background surface soil sample at one foot was also collected.

Off-site sediment/water samples were taken to determine if there is migration of contaminants into Woodlake Pond. Drinking water wells upgradient and downgradient of Air Center were also sampled for possible contamination. The upgradient well is located three miles to the northwest of the site. The other drinking water wells are to the southwest of the site within half a mile and three miles from Air Center.

All surface soil and sediment samples on-site were collected with stainless steel trowels which had been deconned with TSP and detergent and rinsed with deionized water. Trowels used at a particular location were not reused again. Subsurface soil samples were taken at a depth of five to six feet. A mobile power drill was used to drill to the required depth. The subsurface samples were collected using a two inch auger and then transferred with a trowel into

the sample bottles. Water samples from the underground storage tank on-site were collected using a two inch stainless steel bailer which had been previously deconned with TSP and detergent and then rinsed with deionized water. Surface water samples from the drainage area and pond were collected with a stainless steel beaker which had been deconned in the manner stated above. The surface water samples off-site, from Woodlake Pond, were taken using a stainless steel beaker at the end of an extension pole. All drinking water well samples were collected directly into the sample bottle from spigots or from connections close to the well . The wells were purged by allowing them to flow till pH and conductivity measurements stabilized. The results of field measurements of pH and conductivity are presented in Table VI.

Weather during the sampling mission was cold with temperatures around 21°F. It snowed during the days the on-site samples were taken. There was about one foot of snow accumulation on the ground. Subsurface drilling was monitored with an HNu. HNu readings as high as 50 ppm were recorded down the hole. However, since the meter readings were erratic because of weather conditions, no definite conclusions could be drawn from them. Surface water samples and sediment samples along the drainage path were taken after breaking through an ice layer. This had to be done both on-site and off-site at Woodlake Pond.

The breakdown of the sampling is as follows:

Surface Soil/Sediment	On-Site	13	samples	1 Duplicate	
Sub Surface Soil	On-Site	4	samples	1 Duplicate	QA/QC
Surface Water	On-Site	2	samples	1 Duplicate	QA/QC
Soil/Sediment	Off-Site	10	samples	1 Duplicate	QA/QC
Surface Water	Off-Site	1	sample		QA/QC
Drinking Water Wells	Off-Site	5	samples	1 Duplicate	QA/QC
Field Blank		1	sample		

Summary Of Analytical Results

(Refer to Tables I, II, IIA, IV, and V) The analytical results indicate that for many contaminants, especially organics, the concentration values had J Flags next to them. J Flags indicate that the sample concentrations are to be only considered as estimates. In the discussion given below, concentration values for contaminants without J Flags next to them indicate true concentrations.

Organics

Phenol was not detected in the one-foot and six-foot background soil samples on-site. It was, however, detected at concentrations of 46J (ppb) and 62J (ppb) (duplicate) in water from the underground storage tank on-site. These tanks were at one time used to store stripper sludge from aircraft painting operations. Phenol was also detected in soil at the mouth of the drainage ditch (Map Location 20) at concentrations of 2200J (ppb) and 3500J (ppb). Phenol at 10,000J (ppb) was also found at the mouth of the drainage ditch opening into the upper pond (map location 13). Phenol was also detected at 1200J (ppb) off-site in the background soil sample collected at Woodlake Pond. Even though this was found only in the background sample, on the bank of the lake (map location 24), it is possible to account for its presence if the pond had overflowed its banks at some point in time or the lake had been dredged

and the sediment piled up on the banks. However, since these are only estimates (J Flag), there is uncertainty associated with these values.

Samples taken from the underground storage tank indicate xylene at 41J (ppb) and 47J (ppb) and 2 methyl naphthalene at 35J (ppb) and 45J (ppb). Xylene was not found in the on-site background soil samples.

Bis (2-Ethyl hexyl phthalate) at 110 ppb (J Flag) and 220 ppb (J Flag) was found near the concrete drainage pipe on-site (map location 20). This compound was also found in the City of Bethany municipal drinking water well #23 (map location 28) at concentrations of 28 ppb and 9 ppb (duplicate). This well is located three quarters of a mile west of the site. However, since this is a common laboratory contaminant no significance can be attached to these values.

Inorganics

Arsenic was detected (5 ppb) in water found in one of the underground storage tanks. It was detected in the background on-site soil sample in concentrations comparable to those found in soil elsewhere on the site. These are only estimates (J Flag). Arsenic was also detected at 4 ppb in the City of Bethany municipal well #21 located one and a half miles west of the site. However, this is much lower than the primary drinking water standard of 50 ppb.

Chromium was not found in the underground storage tank but was found in the background soil samples at the one foot and six feet levels (9.8J (ppm) and 18.3J (ppm). However, these are only estimates. It was also detected in water leaving the site through the drainage ditch (28 ppb). It was detected off-site at map locations 1,2,3,4,5,6,7,8, & 9 in concentrations ranging from 12.9 ppm to 41.1 ppm. However, these are again only estimates. Chromium was also found in the off-site background sample at 28 ppm (J Flag) and in the City of Bethany municipal drinking water well #21 at 15 ppb (Primary drinking water standard: 50 ppb).

Lead was detected in the background soil samples on-site at concentrations of 9.9 and 6.9 ppm. It was also found in all the soil samples off-site in ppm levels ranging from 6.5 ppm to 33 ppm. The background off-site soil sample had a concentration of 22 ppm. The concentrations of lead in drinking water wells (City of Bethany well #21 & #23 - 176 ppb and 66 ppb) are significantly higher than the primary drinking water standard of 50 ppb.

The on-site background soil sample contained nickel (11.6 ppm and 27.3 ppm) which was also detected at map locations 18, 14, 20, & 15 in comparable concentrations. It was found in all the sediment samples, including the background soil at concentrations ranging from 12.9 to 39.5 ppm. Nickel was detected at 31 ppb in the underground storage tank.

Zinc was found in the on-site and background soil samples at depths of one foot and 6 feet (22.8 ppm & 35 ppm) and in the off-site sample at Woodlake Pond (55.8 ppm). Zinc was detected in water in the underground storage tank at 18 ppb & 25 ppb and was also in all the soil and water samples on-site. Significantly higher concentrations than background were found at map locations 20, 13, 12 & 11. Zinc was also found in the water at map location

10 (27 ppb) and in all the off-site soil samples. It also was present at a significantly higher concentration in municipal well #23 (338 ppb), and in the background well at a concentration of 43 ppb.

Cyanide was not detected in background samples but was detected in the water in the underground storage tank (12 ppb & 11 ppb) and in soil at map locations 20 (4.7 & 3 ppb), 15 (5 ppb) and 13 (78.2 ppb). These values are considered significant since it was not found in the background on-site soil samples. Cyanide was not detected off-site.

The results of the sampling mission appear to indicate the presence of phenols and cyanides at the mouth of the drainage ditch on-site (map location 20) and further downstream at the on-site pond (map location 13). Phenol and cyanide were not detected in the background soil samples on-site but were present in the underground storage tank. Cyanide was also present at map location 15. Phenol was also found off-site at map location 24. Even though the concentration values associated with phenol are only estimates (J Flags), these estimates are considered to be biased low and as such do indicate the presence of these components at the above location. Both phenols and cyanides are commonly used in solvents, metal cleaning fluids and plating baths. These fluids are commonly used in activities with which Air Center was involved.

FIT recommends that the City of Bethany's water superintendent and the Oklahoma State Department of Health be informed about the presence of lead in the City of Bethany municipal well no. 21 and well no. 23. The concentration of lead in these wells (176 ppb and 66 ppb) are above the primary drinking water standard of 50 ppb.

FIT also recommends RCRA and state UST program be informed of the underground storage tanks on-site.

INORGANIC ANALYSIS SUMMARY FOR SOIL

SITE NAME AND NUMBER: AIR CENTER, INC
CASE NUMBER: 8811 PAGE 1 OF 2
CONCENTRATIONS IN PARTS PER MILLION (PPM)

TRAFFIC REPORT NUMBER AND STATION LOCATION.

	MFE 503	MFE 794	MFE 427	MFE 428	MFE 429	MFE 430	MFE 431	MFE 432	MFE 433	MFE 434	MFE 435	MFE 456
	3	1	4	5	6	7	8	9	10	11	12	33
	STA 3	STA 1	STA 4	STA 5	STA 6	STA 7	STA 8	STA 9	STA 10	STA 11	STA 12	STA 33
	SAMPLE LOCATION 3	SAMPLE LOCATION 1	SAMPLE LOCATION 4	SAMPLE LOCATION 5	SAMPLE LOCATION 6	SAMPLE LOCATION 7	SAMPLE LOCATION 8	SAMPLE LOCATION 9	SAMPLE LOCATION 10	SAMPLE LOCATION 11	SAMPLE LOCATION 12	SAMPLE LOCATION 33
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER	SOIL
% MOISTURE	23	18	21	26	20	23	20	25	41	42	20	13
CAS NO.												
ALUMINUM 7429-90-5	10100	7480	12300	19300	22800	12600	8610	20600	8960	10500	18500	8730
ANTIMONY 7440-36-0	0R	0R	0R	0R	0R	0R	0R	0R	0R	0R	0R	0R
ARSENIC 7440-38-2	5.100J	3.900J	9.300J	6.400J	5.300J	9.400J	9J	11.900J	10.200J	11J	7J	7J
BARIUM 7440-39-3	127J	72J	85J	118J	116J	150J	84.900J	162J	404J	187J	151J	96.400J
BERYLLIUM 7440-41-7	0.880	0.630	1.400	1.500	2	1.900	1.400	1.400	1.200	0.900	1.100	1.200
CADMIUM 7440-43-9	1U	0.970J	1	1.100U	1U	1U	1U	1.100U	1.400U	1.400U	1U	0.920U
CALCIUM 7440-70-2	2820	14400	74000	21100	17000	3370	1820	4900	11300	14100	12600	2040
CHROMIUM 7440-47-3	16.700J	15.300J	23.400J	32.300J	41.100J	20.600J	12.900J	32.700J	17.800J	23.400J	28J	9.800J
COBALT 7440-48-4	6.600	6.400	11	14.300	16.500	8.800	5.200	13.800	8.800	11	13.200	6.600
COPPER 7440-50-8	5.200	5.600	10.300	12.800	13.700	8.200	5.500	13.700	11.700	11.800	12.600	8.100
IRON 7439-89-6	14400J	11600J	21900J	26900J	33800J	18200J	10900J	30500J	14700J	18300J	24900J	9660J
LEAD 7439-92-1	8.500	33.100	6.800	7.800	9.900	12.300	6.500	18.300	13.600	25.600	22	9.900
MAGNESIUM 7439-95-4	3490	5070	12200J	20900	16600	3440	1880	8810	6220	8710	9970	1550
MANGANESE 7439-96-5	237J	193J	475J	937J	610J	308J	165J	4499J	384J	463J	580J	233J
MERCURY 7439-97-6	0.130U	0.120U	0.130U	0.140J	0.120U	0.130U	0.120U	0.130U	0.170U	0.170U	0.120U	0.120U
NICKEL 7440-02-0	14.500	13.900	30.400	33.500	39.400	20	12.900	31.200	17.600	25.600	31.900	11.600
POTASSIUM 7440-09-7	1640	1530	1850	3140	4560	1750	988	4040	1410	1410	3750	1120
SELENIUM 7782-49-2	1U	1U	1U	1.100U	1U	1U	1U	1.100U	1.400U	1.400U	1U	0.900U
SILVER 7440-22-4	0.910U	0.850U	0.830U	0.950U	0.880U	0.920U	0.880U	0.930U	1.200U	1.200U	0.880U	0.810U
SODIUM 7440-23-5	145	302	490	332	400	75.800	70.200U	277	468	337	328	64.700U
THALLIUM 7440-28-0	1.300U	1.200U	1.300U	1.400U	1.300U	1.300U	1.300U	1.300U	1.700U	1.700U	1.300U	1.200U
TIN 7440-31-5	0	0	0	0	0	0	0	0	0	0	0	0
VANADIUM 7440-62-2	21.100J	16J	32.700J	26.700J	42J	27.600J	16.400J	34.500J	30.900J	27.600J	29.600J	4.200J
ZINC 7440-66-6	27.800	32	51.500	66.300	75.500	32	26.800	62.300	41.400	47.200	55.800	22.800
CYANIDE	0.650U	0.610U	0.640U	0.680U	0.630U	0.650U	0.630U	0.670U	0.860U	0.860U	0.630U	0.580U
HARDNESS	0	0	0	0	0	0	0	0	0	0	0	0
ALKALINITY	0	0	0	0	0	0	0	0	0	0	0	0

R - DATA IS UNUSABLE DUE TO QA/QC OUT OF CONTROL LIMITS.
J - REPORTED CONCENTRATIONS OR DETECTION LIMITS ARE ESTIMATES DUE TO QA/QC OUT OF CONTROL LIMITS.
B - CONCENTRATION IN SAMPLE ATTRIBUTABLE TO BLANK CONTAMINATION.
U - NOT DETECTED; VALUE REPORTED IS THE DETECTION LIMIT.

INORGANIC ANALYSIS SUMMARY FOR SOIL

SITE NAME AND NUMBER: AIR CENTER, INC
CASE NUMBER: 8811 PAGE 2 OF 2
CONCENTRATIONS IN PARTS PER MILLION (PPM)

TRAFFIC REPORT NUMBER AND STATION LOCATION.

		REF 457												
		34												
		STA 34												
		SAMPLE LOCATION 34												
	MATRIX	SOIL												
	% MOISTURE	12	0	0	0	0	0	0	0	0	0	0	0	0
	CAS NO.													
ALUMINUM	7429-90-5	12200	0	0	0	0	0	0	0	0	0	0	0	0
ANTIMONY	7440-36-0	OR	0	0	0	0	0	0	0	0	0	0	0	0
ARSENIC	7440-38-2	10.500J	0	0	0	0	0	0	0	0	0	0	0	0
BARIUM	7440-39-3	151J	0	0	0	0	0	0	0	0	0	0	0	0
BERYLLIUM	7440-41-7	1.600	0	0	0	0	0	0	0	0	0	0	0	0
CADMIUM	7440-43-9	0.910U	0	0	0	0	0	0	0	0	0	0	0	0
CALCIUM	7440-70-2	2400	0	0	0	0	0	0	0	0	0	0	0	0
CHROMIUM	7440-47-3	18.300J	0	0	0	0	0	0	0	0	0	0	0	0
COBALT	7440-48-4	14.400	0	0	0	0	0	0	0	0	0	0	0	0
COPPER	7440-50-8	11	0	0	0	0	0	0	0	0	0	0	0	0
IRON	7439-89-6	15400J	0	0	0	0	0	0	0	0	0	0	0	0
LEAD	7439-92-1	6.900	0	0	0	0	0	0	0	0	0	0	0	0
MAGNESIUM	7439-95-4	3310	0	0	0	0	0	0	0	0	0	0	0	0
MANGANESE	7439-96-5	340J	0	0	0	0	0	0	0	0	0	0	0	0
MERCURY	7439-97-6	0.110U	0	0	0	0	0	0	0	0	0	0	0	0
NICKEL	7440-02-0	27.300	0	0	0	0	0	0	0	0	0	0	0	0
POTASSIUM	7440-09-7	1370	0	0	0	0	0	0	0	0	0	0	0	0
SELENIUM	7782-49-2	0.900U	0	0	0	0	0	0	0	0	0	0	0	0
SILVER	7440-22-4	0.800U	0	0	0	0	0	0	0	0	0	0	0	0
SODIUM	7440-23-5	66.200	0	0	0	0	0	0	0	0	0	0	0	0
THALLIUM	7440-28-0	1.100U	0	0	0	0	0	0	0	0	0	0	0	0
TIN	7440-31-5	0	0	0	0	0	0	0	0	0	0	0	0	0
VANADIUM	7440-62-2	25.700J	0	0	0	0	0	0	0	0	0	0	0	0
ZINC	7440-66-6	33	0	0	0	0	0	0	0	0	0	0	0	0
CYANIDE		0.570U	0	0	0	0	0	0	0	0	0	0	0	0
HARDNESS		0	0	0	0	0	0	0	0	0	0	0	0	0
[illegible]Y		0	0	0	0	0	0	0	0	0	0	0	0	0

R - DATA IS UNUSABLE DUE TO QA/QC OUT OF CONTROL LIMITS.
J - REPORTED CONCENTRATIONS OR DETECTION LIMITS ARE ESTIMATES DUE TO QA/QC OUT OF CONTROL LIMITS.
B - CONCENTRATION IN SAMPLE ATTRIBUTABLE TO BLANK CONTAMINATION.
U - NOT DETECTED; VALUE REPORTED IS THE DETECTION LIMIT.

SITE NAME: AIR CENTER
CASE NUMBER 3811 PAGE 7 OF 9
CONCENTRATIONS IN PARTS PER BILLION

ORGANIC TRAFFIC NUMBERS
AND SAMPLE STATION LOCATION DESCRIPTIONS

			IFG 257	IFG 258	IFG 259	IFG 260	IFG 261	IFG 262	IFG 263	IFG 264	IFG 265	IFG 266	IFG 267
			NW CORNER OF LAGOON	DRAINAGE DITCH, CONCRETE PIPE	DRAINAGE DITCH	DUST #1	EAST OF SE HANGER	DUST #2	OVERFLOW VALVE, UPPER POND SW SIDE	NORTH OF PAINT STRIP PING AREA AT 1 FT.	NORTH OF PAINT STRIP PING AREA AT 6 FT.	TRIP BLANK	NE CORNER OF SITE
		MATRIX	SOIL	SOIL	SOIL	WATER	SOIL	WATER	SOIL	SOIL	SOIL	WATER	WATER
COMPOUND	CAS#/SCAN	CLASS											
BENZENE	71-43-2	VOA/1											
1,1,1-TRICHLOROETHANE	71-55-6	VOA/1										1J	
CHLOROFORM	67-66-3	VOA/1										1J	
TRANS-1,2-DICHLOROETHENE	156-60-5	VOA/1				2J		2J					
ETHYLBENZENE	100-41-4	VOA/1				6J		7J					
METHYLENE CHLORIDE	75-09-2	VOA/1	8JB	7JB	7JB	3J	11JB		18JB	6JB	4JB	5J	2J
TETRACHLOROETHENE	127-18-4	VOA/1				2J							
TOLUENE	108-88-3	VOA/1				1J		5J				2J	
ACETONE	67-64-1	VOA/2	4JB	5JB	5JB	19JB	6JB	11JB	6JB	5JB		23B	4JB
2-BUTANONE	78-93-3	VOA/2											
CARBON DISULFIDE	75-15-0	VOA/2				2J							
TOTAL XYLENES	1330-20-7	VOA/2				4J		4J					
PHENOL	108-95-2	ABN/1		2700J	3500J	46J		62J					
FLUORANTHENE	206-44-0	ABN/1											
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ABN/1		150J	220J								
BENZYL BUTYL PHTHALATE	85-68-7	ABN/1		110J									
BENZO(A)ANTHRACENE	56-55-3	ABN/1											
CHRYSENE	218-01-9	ABN/1											
PYRENE	129-00-0	ABN/1											
BENZOIC ACID	65-85-0	ABN/2				14J							
2-METHYLNAPHTHALENE	91-57-6	ABN/2				35J		42J					
TENTATIVE SILANOL	254	VOA/3									6J		
HEXANE	343	VOA/3											
UNKNOWN	505	VOA/3											
UNKNOWN	572	VOA/3						15J					
UNKNOWN	598	VOA/3				7J		8J					
2-CYCLOHEXENE-1-OL	501	ABN/3						22J				17J	
UNKNOWN	524	ABN/3				28J							
UNKNOWN	513	ABN/3						10J					
UNKNOWN	544	ABN/3											
4-METHYL-4-PENTENE-2-ONE	552	ABN/3		200JB	460JB			19J				20J	
UNKNOWN	628	ABN/3											
UNKNOWN	641	ABN/3	9100JB	5300JB	3800JB	110J			6900JB	2500JB	2300JB		
2-HEXENOIC CYCLOPENTANONE	672	ABN/3											
UNKNOWN	704	ABN/3				150J		190J					
UNKNOWN	733	ABN/3											13J
1,2-DIBENZENEDIOL	734	ABN/3											
UNKNOWN	970	ABN/3				18J		16J					
UNKNOWN	1016	ABN/3						11J					
2-HYDROXYBENZOIC ACID	1049	ABN/3											

1. PRIORITY POLLUTANT
2. SPECIFIED HAZARDOUS SUBSTANCE
3. TENTATIVELY IDENTIFIED

VOA - VOLATILE
ABN - ACID/BASE/NEUTRAL
PES - PESTICIDE

B - THE ANALYTE IS FOUND IN THE LAB BLANK
J - INDICATES AN ESTIMATED VALUE FOR TENTATIVELY IDENTIFIED COMPOUNDS OR COMPOUNDS FOUND BELOW CONTRACT DETECTION LIMIT
P - PRESENT IN SAMPLE, BUT NOT REPORTED BY LAB

C - CONFIRMED BY MASS SPECTRAL DATA

ORGANIC ANALYSIS SUMMARY

SITE NAME: AIR CENTER
CASE NUMBER 8811 PAGE 8 OF 9
CONCENTRATIONS IN PARTS PER BILLION

ORGANIC TRAFFIC NUMBERS
AND SAMPLE STATION LOCATION DESCRIPTIONS

	IFG 257	IFG 258	IFG 259	IFG 260	IFG 261	IFG 262	IFG 263	IFG 264	IFG 265	IFG 266	IFG 267
	NW CORNER OF LAGOON	DRAINAGE DITCH, CONCRETE PIPE	DRAINAGE DITCH	DUST 01	EAST OF SE HANGER	DUST 02	OVERFLOW VALVE, UPPER POND SW SIDE	NORTH OF PAINT STRIP PING AREA AT 1 FT.	NORTH OF PAINT STRIP PING AREA AT 6 FT.	TRIP BLANK	NE CORNER OF SITE
MATRIX	SOIL	SOIL	SOIL	WATER	SOIL	WATER	SOIL	SOIL	SOIL	WATER	WATER
COMPOUND CAS#/SCAN CLASS 1											
UNKNOWN 1077 ABN/31											
UNKNOWN 1149 ABN/31											
UNKNOWN 1187 ABN/31											
UNKNOWN 1260 ABN/31											
1,2,3,4-TETRAHYDRO-1,6-DI 1279 ABN/31											
UNKNOWN 1333 ABN/31			210J			13J					
UNKNOWN 1499 ABN/31			2400J								
UNKNOWN 1597 ABN/31		180J									
UNKNOWN 1629 ABN/31			300J			7J					
UNKNOWN 1642 ABN/31											
UNKNOWN 1650 ABN/31											
UNKNOWN 1737 ABN/31											
MOLECULAR SULFUR 1750 ABN/31											
UNKNOWN 1752 ABN/31											
ALKANE 1760 ABN/31		190J									
UNKNOWN 1778 ABN/31											
UNKNOWN 1819 ABN/31			170J								
ALKANE 1835 ABN/31		430J									
UNKNOWN 1870 ABN/31											
ALKANE 1880 ABN/31			430J								
UNKNOWN 1889 ABN/31											
ALKANE 1897 ABN/31		310J									
ALKANE 1905 ABN/31		460J									
UNKNOWN 1925 ABN/31											
ALKANE 1947 ABN/31			1000J								
UNKNOWN 1959 ABN/31											
ALKANE 1973 ABN/31		430J									
UNKNOWN 1989 ABN/31											
ALKANE 2032 ABN/31											
ALKANE 2038 ABN/31		460J									
UNKNOWN 2053 ABN/31					160J						
UNKNOWN 2094 ABN/31		350J	1700J								
UNKNOWN 2101 ABN/31											
NONADECANE 2136 ABN/31											
NONADECANE 2137 ABN/31											
ALKANE 2154 ABN/31		300J	1800J								
ALKANE 2193 ABN/31			4000J								
ALKANE 2213 ABN/31		210J									
4,8,12-TRIMETHYL-3,7,11-T 2230 ABN/31								200JB			
ALKANE 2249 ABN/31			3700J				1000J				

1. PRIORITY POLLUTANT
2. SPECIFIED HAZARDOUS SUBSTANCE
3. TENTATIVELY IDENTIFIED

VOA - VOLATILE
ABN - ACID/BASE/NEUTRAL
PES - PESTICIDE

B - THE ANALYTE IS FOUND IN THE LAB BLANK
J - INDICATES AN ESTIMATED VALUE FOR TENTATIVELY IDENTIFIED COMPOUNDS OR COMPOUNDS FOUND BELOW CONTRACT DETECTION LIMIT
P - PRESENT IN SAMPLE, BUT NOT REPORTED BY LAB

C - CONFIRMED BY MASS SPECTRAL DATA

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ORGANIC ANALYSIS SUMMARY

SITE NAME: AIR CENTER
CASE NUMBER 9311 PAGE 5 OF 7
CONCENTRATIONS IN PARTS PER BILLION

ORGANIC TRAFFIC NUMBERS
AND SAMPLE STATION LOCATION DESCRIPTIONS

		IFG 257	IFG 258	IFG 259	IFG 260	IFG 261	IFG 262	IFG 263	IFG 264	IFG 265	IFG 266	IFG 267
		INW CORNER OF LAGOON	DRAINAGE DITCH, CONCRETE PIPE	DRAINAGE DITCH	UST #1	EAST OF SE HANGER	UST #2	OVERFLOW VALVE, UPPER POND SW SIDE	NORTH OF PAINT STRIP PING AREA AT 1 FT.	NORTH OF PAINT STRIP PING AREA AT 6 FT.	TRIP BLANK	NE CORNER OF SITE
	PATRIX	SOIL	SOIL	SOIL	WATER	SOIL	WATER	SOIL	SOIL	SOIL	WATER	WATER
COMPOUND	CAS#/SCAN CLASS											
ALKANE	2270 ABN/3I		370J									
UNKNOWN	2286 ABN/3I											
ALKANE	2306 ABN/3I			2300J								
ALKANE	2323 ABN/3I											
ALKANE	2373 ABN/3I			1800J								
ALKANE	2375 ABN/3I											
ALKANE	2405 ABN/3I		290J					790J				
2,6,10,14-TETRAMETHYLHEXA	2451 ABN/3I			1310J								
UNKNOWN	2544 ABN/3I			1100J								
UNKNOWN	2563 ABN/3I											
UNKNOWN	2599 ABN/3I											
UNKNOWN	2600 AEN/3I	2200J	1100J			980J		1100J	350J			
UNKNOWN	2620 ABN/3I											
ALKANE	2657 AEN/3I			230J								
UNKNOWN	2684 ABN/3I											
UNKNOWN	2697 ABN/3I											

1. PRIORITY POLLUTANT
2. SPECIFIED HAZARDOUS SUBSTANCE
3. TENTATIVELY IDENTIFIED

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B - THE ANALYTE IS FOUND IN THE LAB BLANK
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P - PRESENT IN SAMPLE, BUT NOT REPORTED BY LAB

C - CONFIRMED BY MASS SPECTRAL DATA

SL-40

TABLE II

MAP LOCATION #	DESCRIPTION	MAJOR COMPOUNDS DETECTED (ppb) (FOR COMPLETE LIST REFER TO ORGANIC ANALYSIS SUMMARY)								
		Benzene	2 cyclohexene-1-one	4-methyl-4-Pentene-2-One	4,8,12-Trimethyl 3-7 11 Tridecatrienenitrile	Molecular Sulfur	1,2 Benzenediol	Fluoranthene	2 Hydroxy benzoic acid	Benzo Anthracene
24	Soil 1'				430J	340J	830J		1300J	
1a	Water 1'		16J	18J						
2	Soil 1'				490J					
3	Soil 1'					1000J				
4	Soil 1'	9J				200J		2200J		570J
	dup	8J			300J	270J				
5	Soil 1'				590J					
6	Soil 1'	8J								
7	Soil 1'	9J			430J					
8	Soil 1'	11J			680J	460J				
9	Soil 1'					2100J				

TABLE 14

Soil - ppm;
Water - ppb

MAP LOCATION	DESCRIPTION	MAJOR CLASSES OF (FOR COMPLETE LIST REFER TO INORGANIC ANALYSIS SUMMARY)						
		Arsenic	Chromium	Lead	Nickel	Vanadium	Zinc	Cyanide
24	Background soil	7J	28J	22	31.9	29.6J	55.8	---
1	Soil 1'	3.5J	15.3J	33.1	13.9	16J	32	---
(1)	Water 1'	---	---	4.2	---	10.7	51.7	---
2	Soil 1'	5.10J	16.7J	8.5	14.5	21.1J	27.8	---
3	Soil 1'	9.3J	26.4J	6.8	30.4	32.7J	51.5	---
4	Soil 1'	6.4J	32.3J	7.8	39.5	26.7J	66.3	---
	(dup)	5.3J	41.1J	9.9	39.4	42J	72.5	---
5	Soil 1'	9.4J	20.6J	12.3	20	27.6	32	---
6	Soil 1'	9J	12.9	6.5	12.9	16.4J	26.8	---
7	Soil 1'	11.9J	32.7J	18.3	31.2	34.5J	62.3	---
8	Soil 1'	10.2J	17.8J	13.6	17.6	30.9J	41.4	---
9	Soil 1'	11J	23.4J	25.6	25.6	27.6J	47.2	---

TABLE III

Soil - ppm;
Water - ppb

MAP LOCATION	DESCRIPTION	MAJOR CLASSES OF (FOR COMPLETE LIST REFER TO INORGANIC ANALYSIS SUMMARY)							
		Arsenic	Cadmium	Chromium	Lead	Nickel	Vanadium	Zinc	Cyanide
23	Background Soil 1'	7J	---	9.8J	9.9	11.6	4.2	22.8	---
	6'	16.5J	---	18.3J	6.9	27.3	25.7J	35	---
22	Underground (water)	5				31		18	12
	Storage Tank (water dup)	5	---	---	---		---	25	11
21	Soil 1'	8.4J	---	---	---	---	18.2	24.9	---
17	Soil 1'	9.1J	---	---	---	---	20	21	---
	6'	8.1J	---	---	---	---	22.7	23.8	---
18	Soil 1'	---	---	---	---	---	18.5	21.1	---
	6'					5.1J	20.8	19	---
	(dup) 6'						22.1		
19	Soil 1'	9.8J	---	---	---	---	28.7	28.9	---
	6'	---	---	---	---	---	25.8	---	---
14	Soil 1'	7.80	---	---	---	7.2J	20.6	22.3	---
20	Soil 1'	3.4J	---	---	---	14.6J	20.3	59.1	4.7
	(dup) 1'	5.4J	---	---	---	17.2J	22.3	---	3
16	Soil 1'	10.4J	---	---	---	---	20	24.4	---
15	Soil 1'	12J	1.2J	---	---	15.3J	22.3	31.9	5
13	Soil 1'	12J	4.4J	---	---	---	26.8	75.3	78.2
12	Soil 1'	7.4J	---	---	---	---	19.6	33.7	---
11	Soil 1'	8.8J	---	---	---	---	16.7	39.5	---
10	Water	---	---	27	---	---	---	27	---

OFF-SITE

TABLE IIA

MAP LOCATION #	DESCRIPTION	MAJOR COMPOUNDS DETECTED (ppb) (Continued)					
		Chrysene	Pyrene	Hexane	1,2,3,4 Tetrahdro 1,6,-Dimethyl -4(1-Methylethyl) Napthalene	Phenol	2 Hydroxy Cyclo hexane
24	Soil 1'					1200J	1200
4	Soil 1' (dup)	770J	1700J				
5	Soil 1'			6J			
7					360J		

ecology and environment, inc.

1509 MAIN STREET, DALLAS, TEXAS 75201, TEL. 214-742-6601

International Specialists in the Environment

M E M O R A N D U M

TO: Ed Sierra, Region VI RPO

THRU: K. H. Malone, Jr., FITOM

FROM: Melissa Stallings, FIT Environmental Scientist

DATE: June 19, 1991

TDD: F06-8906-23
PAN: F0K0270GAA

SUBJECT: Removal of Investigation Derived Waste (IDW)
at Air Center (Wiley Post Airport)
Oklahoma City, Oklahoma County, OK
(OKD980750319)

On December 4, 1990, the FIT issued a delivery order (copy attached) to FIT subcontractor Environmental Field Services, Inc. of Oklahoma City for the removal and disposal of IDW from Air Center (Wiley Post Airport) in Oklahoma City, Oklahoma. Chemical data shows the IDW was RCRA non-hazardous.

On May 21, 1991, Mr. Wayne Fuller of Wiley Post Airport confirmed to FIT member W. Jared Fuqua that the two 55-gallon drums of IDW were no longer present on the site.

Ecology and Environment, Inc.

DELIVERY ORDER

DISPOSAL OF INVESTIGATION DERIVED WASTE (IDW)

FIT Contract Number FIT 90-004

Site Name: Air Center, Wiley Post Airport
Address: Rockwell Ave. and 3rd Street
Oklahoma City, OK
CERCLIS#: OKD980750319

Date: 12-4-90
D.O.#: 8906-23-005
TDD#: F06-8906-23
PAN: FOK0270GAA

Contractor: **Environmental Field Services, Inc.**
1813 SE 25th
Oklahoma City, OK 73129

IDW Was Generated/Will Be Generated 1/88 *Date*

Number of 55 Gallon Drums that are:

1 Decontamination Solution
____ Purged Ground Water
1 PPE/Trash
____ Soil
____ Empty

Preliminary Classification of IDW

[X] RCRA Non-Hazardous

Disposal Strategy: Schedule pick-up, notify E&E of pick-up date. E&E will contact site owner for site entry permission. Map attached.

[ ] RCRA Hazardous
- [ ] TCLP *specify*
- [ ] Reactive *specify*
- [ ] Corrosive *specify*
- [ ] Ignitable *specify*
- [ ] Listed, F,K,P,U waste *specify*

[ ] Dioxin *specify*
[ ] TSCA Waste *specify*
[ ] LLRW *specify*
[ ] Mixed Waste *specify*

Disposal Strategy

Melissa Stallings — *Regional Project Manager*
12-3-90 — *Date*

00282.PM3

Distribution:
Sheet 1 White – EFS
Sheet 2 Canary – Region VI FIT
Sheet 3 Pink – E & E Accounting
Sheet 4 Goldenrod - EPA RPO